

SSA Constitution laid down

Will it bring human qualities to the system?

By BOB BLAIR

Although a Science Students' Association still does not exist in full force, a large step toward this end was taken yesterday.

A meeting of the SSA commenced shortly after five o'clock in P126. After opening remarks (which, presumably, were made to stall for time until the arrival of acting secretary-treasurer Darryl Gregorash), acting president Duncan Campbell was asked what was the purpose of the Association. He replied, "We are trying to depersonalize a few things."

After the furor had died down Mr. Campbell conceded that he was none too good at public speaking and that what he had meant was "humanize".

The next question was what purpose the SSA could fulfill that the various department clubs could not. A voice from the back of the room, reported to belong to a member of the rather nebulous body known as the Steering

Committee, replied, "I have seen students lost and completely disoriented despite the fact that they have been members of these department clubs."

At about this time Mr. Gregorash arrived and the meeting moved on to its purpose—adopting a constitution.

Probably the most debated amendment to the proposed constitution was one to add a section to Article II to make representation to the faculty one of the objectives of the Association.

Associate Dean K. B. Newbound, who had been invited to attend the meeting, was asked to give some statement on the matter.

He said the faculty had been impressed with student representation in the past. "All I can say at the moment is we're very receptive."

The constitution was amended to include as one of the objectives of the SSA "the representation of the collective interests of the membership of the Associ-

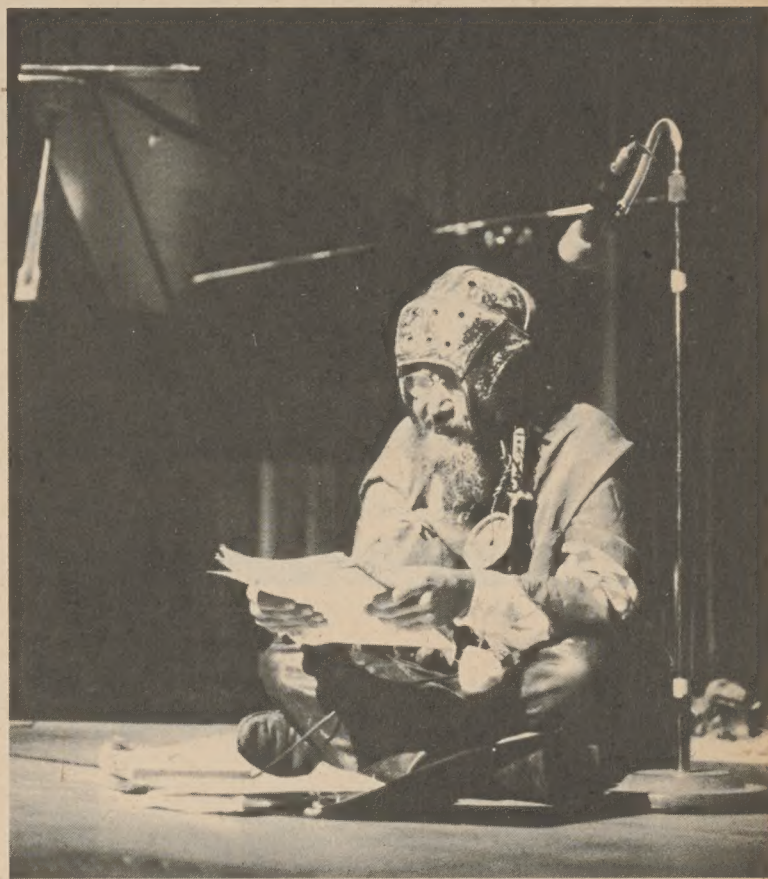
ation." This was understood to refer primarily to representation to University of Alberta administrative bodies (although it was stated that representation to various levels of government would also be included).

About 6:20 it was realized that although the meeting had started with a quorum as defined by the proposed constitution, the number of people present had decreased to well below this level.

Since there remained nine articles out of 13 to be looked at, and the amended constitution could not be adopted in any case, it was decided to table matters until another date. This would allow people time to consider the proposed constitution on their own and hopefully allow them to go through the rest faster.

Note the change

University of Alberta Vietnam Action Committee now has a temporary office in SUB 258. Phone 432-4121 during the day and 432-4356 evenings. WE NEED HELP!



—Chris Scott photo

IT WAS A MULTIFACETED HAPPENING which produced the strange creature seated upon the floor. The occasion was the Al Neil Trio doing their thing with a varied assortment of piano, violin, drums, recorded bells and voices, and free jazz and expressive music. The poetry reading by Al Neil and free dance theme were heightened by red and blue colored lights in SUB theatre Wednesday night.

Residents of hostel disregard eviction

VANCOUVER (CUP)—Residents of the Jericho Hostel, a converted government army base, decided Wednesday to occupy the building after they were notified to leave by Friday.

The eviction notice came two days early and the people in the hostel voted unanimously to stay in the building.

The notice from the Federal Secretary of State said: "We are deeply distressed that we have been forced to close this hostel without an alternate program. However, to ensure the formulation of future programming we

ask the cooperation of those currently benefitting from the facility."

"They just don't want the people to have a chance to organize anything," said hostel staffer Ted Mahood.

Meetings were held this morning at UBC to plan support actions for the hostel residents. Two committees were formed at the same time.

One committee will investigate the possibility of hostel residents being moved to buildings at Vancouver City College, a two-year college that is being moved to a new site. The buildings will be vacant by October 17.

Fritz Bower, a member of the Vancouver School Board which operates the college, said, "there is a possibility that the School Board Trustees could be persuaded to allow the use of the buildings as a hostel provided a 'responsible group' were in charge and that the arrangements would not cost the School Board any money."

The second committee is a mobilization committee to plan action in the event the hostel is closed at the set time.

The two committee proposals were to be presented to UBC students at a mass meeting today but CUP has not heard of the outcome.

The Trudeau government will be petitioned to delay closing of the Youth Hostel if the college facilities can be made available.

Laurentian University faculty strikes

SUDBURY (CUP)—The boycott of classes by instructional staff at Laurentian University entered its second day Thursday with no sign of any agreement being reached between the Board of Governors and the University Senate, representing faculty and students.

The decision of the Senate for faculty to boycott classes is a continuation of a struggle that developed between the Senate and the Board's Executive Committee last year over the firing of Administration President Stanley Mullins.

A Senate motion on Monday suspended classes for one week starting Wednesday "for the purpose of preparing a statement on Laurentian University, its government future, for submission on Wednesday, October 7."

Both the board and the acting Administration President Roland Cloutier have branded the instructors' actions as illegal, but Board Chairman William Shea said Tuesday that he felt the move was legal.

The boycott is being supported by a majority of the campus' faculty, with only some science and math instructors still holding regularly scheduled classes.

Wednesday, about 1,100 of the 2,100 students jammed into a 700-seat auditorium to hear the Senate explain its position in the battle.

The faculty is conducting study sessions each afternoon centering

on discussions of university government.

However, many students have left the campus for the weekend, and Thursday's sessions saw little student participation.

The Senate wants "A removal of the Executive Committee (of the Board of Governors) and the appointment of a new Executive Committee with limited powers of recommendation with membership to include faculty and students."

The Board and its executive have rejected the demands and called for a return to "normality."

The Senate charges that the executive has "usurped powers pertinent to the office of the president and has made unethical use of confidential information in relation to details of proposed professors' salaries" by releasing the figures to the press.

(Two members of the Executive Committee own Sudbury's only newspaper and the city's largest television and radio station.)

A letter released by Administration President Cloutier Wednesday advising students that "if you want to destroy the university you will have to accept to be destroyed with it," has effectively removed any chances the President might have had as a negotiator in the dispute.

The student newspaper reports that privately many students feel that the university may remain closed until the university adopts

a unicameral system, that is, just one governing board replacing the present Senate and Governors, that will give greater representation to faculty and students, or through which the powers of the Board of Governors are greatly reduced.

NOTICE

The last date for payment of fees is October 15. If a student is paying in two instalments, the last date for the payment of the first instalment is October 15; the second instalment January 15.

A penalty of \$5 will be charged on any payment made or post-marked after these dates. If payment has not been made by October 31 for first term fees and January 31 for second term fees, registration will be subject to cancellation and the student to exclusion from classes.

If fees are to be paid from some form of student assistance, please refer to your calendar for advice to avoid late payment penalty.

Students in the faculty of graduate studies are reminded that their fees are to be paid by the date indicated on the fee assessment advice form.

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A new students' reception is being sponsored by the Chinese Christian Fellowship at 7:30 p.m. in the Meditation Room. All students are welcome.

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**SUNDAY
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ENTERTAINMENT?
WHERE?
see page 6**

BADMINTON CLUB

"Anyone interested in joining the U of A Badminton Club is invited to sign up Oct. 2 at 7:30 p.m. in the ed gym.

STUDENT CINEMA

Student Cinema presents "Loneliness of a Long Distance Runner" on Oct. 2 at 7 and 9:30 p.m. in SUB Theatre.

YOUNG SOCIALISTS

There will be a forum at 8 p.m. (at 9686 Jasper Ave.), "For An Independent Socialist Quebec." The guest speaker will be Bob Holoch, executive member of the Edmonton branch of the League for Socialist Action.

LSM

The fall retreat will be held Oct. 2, 3, and 4 at the Mulhurst Lutheran Church camp. Guest speaker, Pastor Marvin Haave, will lead a discussion about the Christian perspective and where this focuses people in the world.

SYMPHONY SOCIETY

The first concert preview of the season, sponsored by the Women's Committee of the Edmonton Symphony Society, will take place Friday at Molson's Edmonton House, 104 Ave. and 121 St. Mr. Lawrence Leonard, conductor of the Edmonton Symphony, will discuss the program to be presented at the weekend concerts.

WEEKEND

UNIVERSITY PARISH

The University parish regular celebration will be followed this Sunday by a parish meeting to discuss and develop the program for this term and year.

UKRAINIAN CLUB

A meeting of the Ukrainian Club for elections will be held on Sunday at 3:30 p.m. See monitor for room number.

SCM

The second meeting of the SCM will be held Oct. 3 at 9 p.m. in the Meditation Room. The fall camp and the events and direction of SCM will be discussed.

OTHERS

U OF A PC

There will be a meeting of the U of A Progressive Conservative party on Mon., Oct. 5, at 4:30 p.m. in SUB 140.

STUDENT HEALTH

Dr. Ball has arranged for any students who are positive to the tuberculin test, and who did not get chest x-rays in Sept., 1970, to get an x-ray in the mobile unit which will be at Student Health Service Building Tues., Oct. 20, from 9 p.m. to 12 noon and 1:30 to 5 p.m.

MUSLIM STUDENTS

The Friday prayer is regularly held in the Meditation Room beginning at 1 p.m. until 1:30 p.m. All Muslim students are urged to attend.

CKSR

CKSR Student Radio is now broadcasting from 6:30 a.m. until 1 a.m. in the lounges of arts, Tory, new eng, ed, Zorba's and on 1580 in the Lister Hall residence complex.

SKYDIVERS

A general meeting of the University Skydivers will be held on Oct. 5 at 8 p.m. in SUB 104.

SCIENCE STUDENTS' ASSOCIATION

The SSA's mixed curling league begins Oct. 4 - Dec. 13. Any students interested in social curling at 9 p.m. on Sundays, contact SSA at 469-2771. Beginners welcome.

WOMEN'S SWIM TEAM

Starting Sept. 28, practices for the women's intervarsity swim team will be held from 5:30-6:45 p.m. at the new pool, phys ed annex.

Survival: a Day for thought

October 14 has been designated Survival Day in Canada.

The event has been termed "a day for thought, study, debate, and action regarding the equality of our environment, today and in the future."

Survival Day is a national event, organized by a group in Hamilton and co-ordinated by representatives in the provinces.

Several Edmonton organizations are participating in the day's activities. A public forum and panel will be held in SUB's Dinwoodie Room, October 14,

15, and 16 at 8 p.m.

On the last day (October 16) Ralph Nader, the well-known American environmental gadfly, will be speaking in Dinwoodie at 3 p.m. This talk may be extended to an evening session as well.

The Centennial Library will feature a free film and lecture series on environmental topics beginning October 9 at 7:30 p.m.

Additional resource materials and speakers are available through the Edmonton Anti-Pollution Group, Suite 301, 10182 - 103 St.

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24th week

Student reps off GFC

Last July, the Ad Hoc Committee on Student Participation on GFC and its committees published its interim report.

The report recommended the membership ratio of GFC for administration, faculty, and students be 1:2:2, with specific numbers recommended for other constituent groups.

This would give the General Faculties Council a membership of 129: 24 administration, 48 elected academic staff, 48 elected students (38 undergraduates and ten graduates), plus membership from the Academic Staff Association, the Students' Council, the Graduate Students' Association, and the Non-Academic Staff Association.

The students' union has offered an alternate proposal.

Previously, there have been only three undergraduate representatives in a total of 76 GFC members. Because students' council felt that this was "token" representation, they pulled student representatives off the GFC and its committees on February 23 of this year.

Students are to remain off these bodies until parity is achieved.

The students' union brief said "it is the policy of the students' council that the students should have a meaningful voice in deciding university affairs. It is felt that excluding the students from a significant role in the decision-making process merely exposes the hypocrisy and hollowness of the concept of participatory democracy in the university."

The students' council also disagreed with its inclusion on the GFC as an "interest group." This would create two distinct groups from the student body, both ostensibly to be student representa-

tives. Conflict might arise over the situation.

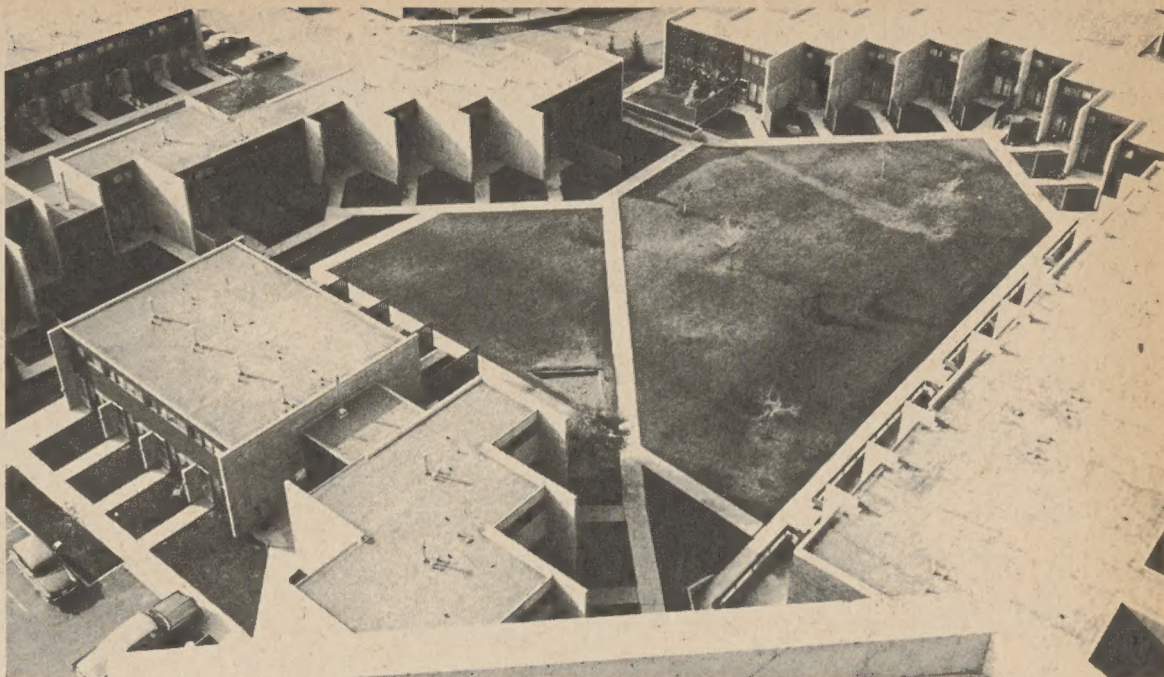
"A more equitable proposal would be to establish a duality in the position of student councilors, whereby it was mandatory for them to sit on both students' council and the GFC" said the brief.

Another proposal forwarded by the brief is that all student reps on the GFC receive a *per diem* honorarium.

Active involvement on the council would be time-consuming. Faculty or administration members receive remuneration in the recognition that it is part of his job, and that other duties may have to be re-arranged or lightened to compensate for the time involved in this extra work.

The students' union itself grants honoraria to those who devote a great deal of time to extra-curricular involvement.

The final report of the ad hoc committee on student representation will be tabled at a special GFC meeting later this year. Student representatives will be present, probably as observers only.



—Chris Scott photo

MICHENER PARK

... a new home for married undergrads

Michener Park opened to undergrads

By SID STEPHEN

The critical housing situation for students attending U of A and attempting to remain married at the same time has been eased somewhat with the opening of Michener Park Residence to married undergraduates.

GFC approved the move August 1, thus making it possible for an undergrad to be considered for admission on the same basis as a graduate student.

At present most students in Michener Park are graduates, since the policy in the past has been to allow no undergrads. This situation will change as these complete their work and

leave university, and their place will be taken by those on the waiting list without distinction as to their academic status, said J. W. Raven, director of Housing and Food Services.

The waiting list now contains approximately 125 families, with "not much movement expected," according to Mr. Raven.

"September is our big month," he added, "although with the graduate students, some may leave as they finish theses and graduate programs through the year."

Each summer the housing office sends a letter to those on the waiting list, asking if they still wish to move in. If there is no reply, the names are taken off the list, and in this way the lists are kept up to date.

Only families with a combined income of less than \$7,500 per year are considered, said Mr.

Raven. A declaration is taken from residents each year to insure that this figure is adhered to.

At present the scale of rents runs from \$118 per month for a two bedroom basement suite to \$122 monthly for a one and one-half bedroom suite in the high-rise portion of the residence. However, no children are permitted in the high-rise.

Phase II of the development will begin "as soon as funds are made available," Mr. Raven said. The building will be done in two stages, with a total construction of 729 units, with playgrounds and a five-acre park incorporated in the expansion.

Rent for the units to be built in Phase II will depend on the rate of interest required on the money borrowed for the project, though a ceiling may be established by the Student Housing Services and students' union.

Yearbook fate in your hands

SU GENERAL MEETING

A general meeting of the students' union will be held Wednesday, Oct. 7 at 11 a.m. in the Ice Arena to discuss the future of the yearbook. A quorum of ten per cent of the student body will be required. Failure to meet quorum will result in a final decision on the issue being made by the students' council.

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SUNDAY SMORGASBORD? ENTERTAINMENT? WHERE?

see page 6

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STAFF THIS ISSUE—The people's paper leader is damn pissed off that nobody showed up to do anything last night. Those who did will be honored and revered forever and will have one whole chapter to themselves in the soon-to-be published *Memoirs of a Deactivated Activist*. Ron Treiber, Dick Nimmons, John Miller, Sid Stephen, Bob Blair, Ralph Watzke, and Jim Taylor will have a chapter devoted to each of them. Dale Rogers and Joe Chi might get one-half between them and the other twelve will go to that deserving and ever-present serpent of the galleys, Harvey G. (for goddamn everyone else) Thomgirt.

The Gateway is published tri-weekly by the students' union of The University of Alberta. The editor-in-chief is responsible for all material published herein. Final copy deadline for Tuesday edition—6 p.m. Monday, Advertising—noon Thursday prior; for Thursday edition—6 p.m. Wednesday, Advertising—noon Monday prior; for Friday edition—6 p.m. Thursday, Advertising—noon Tuesday prior; for Saturday edition—6 p.m. Friday, Advertising—noon Friday prior. Short Shorts deadline, 3 p.m. day prior to publication. Advertising manager Percy Wickman, 432-4241. Office phones 432-5168, 432-5178. Circulation 13,000. Circulation manager Wayne Box.

PAGE FOUR

FRIDAY, OCTOBER 2, 1970

Tenure—should it be retained?

by Judy Samoil

The dirtiest word at universities is no longer the four-letter variety. It has become a six-letter word: *tenure*. Students are becoming increasingly aware of the internal issues of university administration and have concentrated on tenure as one of the largest and most crucial issues requiring revision.

Basically tenure is a system whereby persons desiring permanent employment as professors at a university must spend a certain amount of time (two years for U of A) at that university, at the end of which he is considered for employment on the staff. Once tenure is granted there is little possibility of it being revoked without an extraordinary reason.

The original purpose of such a system was for the protection of the professor, to reassure him that he couldn't be fired at a moment's notice. It was almost an early form of social security and guaranteed income, for once tenure was obtained the professor was assured a position at that university. Anything short of attacking a student or sabotaging the computers was supposedly tolerated before he would be asked to leave. As long as the professor played the game correctly and refrained from disrupting the system he was safe.

Students, however, are given little if any, protection through this system, because it was designed exclusively for the teaching staff. The students have to put up with whatever kind of prof has managed to survive the system, regardless of the quality of output, be it good, bad or indifferent. This status, of course, is merely an arbitrary weighting by the students and doesn't hold much power. It appears that once tenure has been granted, there is little attention paid to the professor from then on.

It would be very possible, under such a system, for a professor to painstakingly compile lecture notes while making a bid for tenure, then to use the same notes for the next twenty years with little or no revision, and less chance of anyone saying anything. It is also possible for him to have started out a fairly good professor and to degenerate into a very bad one, with few people ever concerning themselves about it, except maybe students.

After all, the man does have tenure—as if that is the ultimate criterion. The professor's peers can hardly be expected to recognize faults in his methods, since they themselves have probably fallen prey to the same things. The only people who could properly know the value of the prof are his students, but they are not merely the silent majority on campus. They are the voiceless majority. A revision in student representation could do much to rectify this situation.

The present tenure system is an out-moded and backward method for the university to be operating under. Students are constantly under review as to their performance, and the same should apply to the teaching staff. This implies more than just a periodic check to ascertain whether he is doing enough research or is keeping up on the "publish or perish" dichotomy. It means that his teaching ability should be scrutinized and those not attaining some arbitrary standard (including students' evaluations) should be required to remedy the situation or lose their tenure. The stress on students is to continually upgrade their performance. Professors should have to do the same.

A better system than the present life-time membership, must be possible. Such a system could have specific time limitations for how long "tenure" would be valid, perhaps five or ten years. A professor, upon qualifying for "tenure," would receive it for this length of time, at the end of which he would come under review and could be further granted tenure if indicated by his performance. Hopefully this could up-grade the standard of teaching and would discourage the stagnation of professorial intellect which seems inherent in the present system.

"Communication!" the council says—but they're wasting opportunities

By JOHN MILLER

Wednesday afternoon once more afforded the opportunity for Tim Christian to speak on behalf of the students of the university, and once more, the cries of "irrelevant" and "unrepresentative" were heard.

The cries are rather time-worn, but unfortunately true. It is questionable whether the student brief to the Worth Commission was a representative sample of student opinion.

Mr. Christian not only failed to present the views of the student body, but failed to communicate the intent of the brief. Tim continually had to explain the intent of the submission. To his credit, he articulated the position of the submission very well. It is unfortunate that his literary abilities were not on a par with his verbal talents; it would have eliminated a lot of confusion.

Granted, the document was only a statement of intent to present a more detailed brief at a later date. Whether or not a full brief will be eventually submitted remains to be seen.

Whether or not the executive of the students' union is representative is a debatable issue. One of the key points of controversy in any such debate is the amount of responsibility a representative has towards his electorate. Time and time again elected representatives have alluded to a speech made by Dr. Grant Davy last year and have appeared to use this speech as a basis for determining their responsibility. Dr. Davy at the time of the yearbook

debate stated that representatives were elected on the basis of a platform and, given this mandate, were entitled to vote according to their conscience.

While Dr. Davy's statements were indeed true, they referred to federal and provincial systems of government where a parliamentary and party system is involved. A basic principal in this type of government is accountability at set periods of time.

The students' union is structured along a municipal form. However, because of the rapid turn-over in student population, most of the elected people serve for one year only, especially at the executive level. This means no accountability to the electorate. To make this problem more acute, there is no provision in the constitution for impeachment.

To put it bluntly, once a person is elected, nothing short of assassination can remove him. A petition by the students might force an elected person to reassess his position but resignation would still be at that person's discretion. A further complication is that such a petition to be considered valid, would require 10,000 signatures (four times the number of votes cast for the successful presidential candidate)!

Election of representatives on the basis of platform is purely hypothetical and definitely not applicable to campus elections. Most election planks are of the "motherhood" and "apple pie" variety and students vote on the basis of personality and amount of publicity, rather than issues.

The electoral body neither demands, nor do candidates feel, a commitment towards platforms. This was exemplified recently by Dave Manning, who, after campaigning on a pro yearbook platform has reversed his stand without consulting the electorate.

I would not suggest that the executive has completely ignored platforms but there is one area that they have neglected seriously. Each member promised increased communication with the student body as a whole. A token gesture was made with the decision to hold "hot seat" sessions, but this was tried last year without success. The year is young yet, but many golden opportunities have been passed up. No member of the executive spoke at the rock festival, and the only thing we've seen in Gateway is a column by Ann McRae urging students to get involved, and a letter by Dave Manning asking the electorate to tube the yearbook.

The students' union not only has failed to meet their personal commitments, but has also been remiss in fulfilling the commitments of the previous council. That body guaranteed the students a referendum on the yearbook, and this council has opted for a general meeting, knowing the chances of acquiring the quorum are negligible.

I do not suggest that the council of the students' union is purposely plotting against the students. They have however neglected the needs and wishes of the students.

Could it be there really is a use for profs, or do the textbooks do the job just as well?

Attending the first class, each professor encountered had but one thing to say about his lectures. If you don't want to come, then by God don't. This seems like a generous decision. But, what does this mean? We have been told if we study our text we can surely pass our year. Attendance at lectures is not required, in fact almost stipulated not necessary.

Could this mean then that (1) the prof is saying that he only knows what is in the text and cannot enlighten us any further, or (2) the prof knows less than what is in the text and by leaving an opening is hoping that no one appears to discover his ignorance. Then again, we were all given the room number of the prof and when we could see him if some problem arose. Could be there is a use for him after all. Should we then test this, go to the prof with an imaginary problem to see if he gives us the answer. But what if he just gives us the name of another book, and states "Seek and ye shall find." No, we had better not, why shatter all the illusions we have?

Shall we carry this one step further. Now these profs get paid a goodly sum of money to be here. Granted, not all their salary is earned by the process of teaching, but we can submit that a major portion is thus dispensed. So, if we then do not have to

attend the lectures because our texts are just as good, why not just use our text and cut the prof's salary accordingly and put the saved monies to better use. Besides we all know how the university is crying for lack of funds. This then could be a solution to the rising cost of education.

A better idea. As we are mostly short of funds ourselves because of the cost of the courses, why not a few of us volunteer to be the profs at say one-quarter their salaries, and tell the classes to

use the text only. This would surely solve everyone's woes. But, just what would happen if we became interested in our students, and possibly went out of our way to help them. Would this be the end of the educational structure as we know it. Can you imagine actually caring about your students. Unthinkable. No, let us accept the system and remain silent. In fact I don't think an article like this should be printed, it may create waves.

Shannon Smith
arts 1



There is a lot of bull in this issue, but read on anyway.

THIS S FORUM I V PAGE



Even in Quebec they don't like French —they leave you without a culture

As an exchange student from the province of Québec, I was interested in the little bits and pieces that you have upon occasion thrown out on that area of the country. However, I doubt that many of your faithful readers ever take note of these articles and I would suggest to them that they do. Before too much more time passes, Québec

will explode, and it is not for all the clichéd reasons that I have heard on this campus, in some of the political science classes, or in SUB. Alberta tends to feel it is so far removed from the problem. Wrong. When Québec goes off, as it will, the rest of Canada goes too. This sounds all very egoish coming from a Québécois, but just consider the following, and perhaps those of us who are Québec Nationalists will not be told to "speak white." There are several fundamental reasons for the unrest, which for some takes the lunatic expression of bombing, killing and the like. For others, both French and English, these reasons pose a much greater problem than can be solved by violence.

- If you do not speak English as if you were born into it, you will rarely get a job with any great degree of responsibility, no matter what background you have had in that field.

- If you go to a French university, you graduate with a degree which has a higher standard of achievement than any equivalent English degree in Québec, yet the English graduate gets the job first.

- If you wish to be served in French in any of the leading business organizations, you will be rudely told to speak, and to listen, in English or leave.

- If you do have a responsible job, you must make all your communications to other personnel in English, even if those French speaking employees may not understand the message properly be-

cause of legalistic wording or vague translation.

- If you turn to improve your lot through the system, you most likely will vote Parti Québécois—and what happens? Seven seats in the Legislature backed by 40 per cent of the popular vote.

Ridiculous? Of course. Why? Your interests as a people will be promoted only in so far as these interests do not conflict with those of the English business community. So why not set up French business communities? With what? Education, sure, if you can get a job later. Investment. Fine, but who holds the capital and the control of corporations? Speak English? Great, but where does that leave you as a cultural entity—nowhere.

What would you do if you were faced with this situation? Give up and join the English? Hold a double standard and play an Uncle Tom role? Become militantly anti-English? So before any of you judge the French or Québécois people too quickly, think about what you would do, and then condemn or accept. Not all Québécois are French, and not all Frenchmen are separatists. There is a spreading feeling of disgust for the situation among the three English speaking universities. Some of the most radical separatists are English. Be careful how you judge us in Québec—you are not so far removed as you might think. God help anyone who underestimates Québec and its people.

Elisabeth Sachs
arts 3

Gateway, you aren't enlightening enough so I'll tell you what you can do about it

I feel that I should state that your editorial of Sept. 25, "So whose problem is it?" is far less enlightening than the letter "This is getting ridiculous—it sure isn't education" by Gerry Lacombe. At least the Lacombe letter told us a bit of fact. The editorial, contrarily, used fact to support a non-think polemic directed at the provincial government with a style befitting the irresponsible press of North America (including many student newspapers).

If the paper is seeking to enlighten the masses it might better focus more of its effort on real problems facing the vast majority of the students on campus. What are these problems? Surely the fact that the government has refused to donate unlimited amounts of money to this greedy

machine without understanding why they do so is not a real problem to the students here. Maybe the fact that the university refuses to say just what is done with the money is.

Might I suggest that the newspaper could do a real service to the campus if it would investigate certain problems and publish non-ideological reports in a fashion worthy of those invested with the right to publish. After all, if the university press does not actually opt for higher standards than the local press it casts doubts on the excellence of the university itself.

In line with the above, and related to the real protest of Mr. Lacombe, who has to face daily the 300 level classes with enrolment of 400-500, might I suggest

topics such as:

The proliferation of low enrolment courses at advanced levels and the university's inability to deal with a problem that the leadership is well aware of;

The fact that professors who live within less than a block of the campus are given parking spaces on campus while students from miles away cannot park. And here, I might add, our President is not offering exemplary behavior.

I am suggesting that were it common knowledge that the actual expense directed toward each of my students is less than \$30 per year, and that the same students were paying (by average) \$80+ for the course, some unrest about tangible issues at this university might develop.

Were The Gateway to offer information relevant to such issues it might lead to a community of "concerned students" which would integrate those who would otherwise be political opponents. (Political loyalty is unworthy of an educated man anyway.) I fear, however, that nothing of the sort will be done, for, even the radical students reject the tiring work of investigating the university.

I have long held that the students are the only ones who can actually put the university on the track heading toward its vain motto. But this will not be the case unless the students are willing to do the work that will allow them, through analysis of statistics about the university, to force the university to direct more of its attention toward the actual classroom situation and less toward the promoting of its image.

I understand, of course, that for this to happen the students are going to have to re-evaluate their position toward confidential information and press for access into data such as is kept by Institutional Research. With wisdom they could utilize such data to develop support from sources usually alien to them. No man, regardless of his politics, wants to write \$400 checks for \$200 worth of education.

For a paper of the quality of The Gateway such a change in publication policy might do one of two equally beneficial things: (1) motivate the students through information of direct relevance to them; (2) force the BOG to shut it down. Either alternative would ennoble The Gateway.

P. Tietzen
sociology

COFFEE SPOONS

by David Schleich

When you wonder about noses you find your eyes seeking out the patterns and variations of that splendid organ on every sample that passes your gaze during the day. Examine, for a moment, your own nose. If it is enormous, like mine, you have several advantages over those minute, feminine noses which are currently fashionable.

First, it would seem that the sheer volume of air which might pass through that passage must be greater than that small inhalation of the lesser noses. Secondly, during cold spells, the area for regurgitation of nasal syrups is much greater, allowing for fewer blowings of a more successful ordering. Thirdly, during oscillation this tender nasal protrusion can (if such techniques be critically and tenderly practised) be of great value in gentle stimulation and facial exploration.

Fourthly, such an enormous nose can instantly identify you as being part of a particularly elite nasal heritage. Significantly, Napoleon Buonaparte was alternately blessed and scourged by his gigantic nose. Often, unfortunately for France but happily for Russia, in the steppes his allergies would explode into two carefully directed volumes of air which would promptly scatter his maps and messages to the winds.

As well, in the same tradition, Lyndon Brains Johnson, the proud, cracker-barrel president, would, on occasion, insert his magnificent schnoz metaphorically into many stew pots to savour the aroma of, say, an Asian apéritif or of an almost ready Caribbean dessert. Finally, the late Mr. Nasser's grand organ would stand out fiercely in Cairo as the highest and most authoritative vantage point among the heads of state at Arab Conferences. Thus to say that a large nose qualifies you for quite a remarkable legacy of former greats.

If, on the other hand, your nose is small and perhaps so dainty that even blackheads can't find it, yours is an entirely different legacy. However, that account belongs elsewhere. Let it suffice to repeat that ancient Mongolian proverb, "A teeny nose blows little wind."

This is a tale of mashed grapes

Once upon a time there lived in a small but all-encompassing house three jolly souls. There was the Good Christian, the Beer Stein and the Humble Porter. The Good Christian with his regal bearing and lofty ideals applied himself assiduously to the task of providing "the gift of life"—providing the "wine and the grape" for the ignorant masses.

But then along came Stein—and he stomped on the wine and the grape. And the Good Christian said:

"Hey man, whad' you wanna go stomping on my wine and grape for, man?"

And the Stein flowed back, "But what are friends for?"

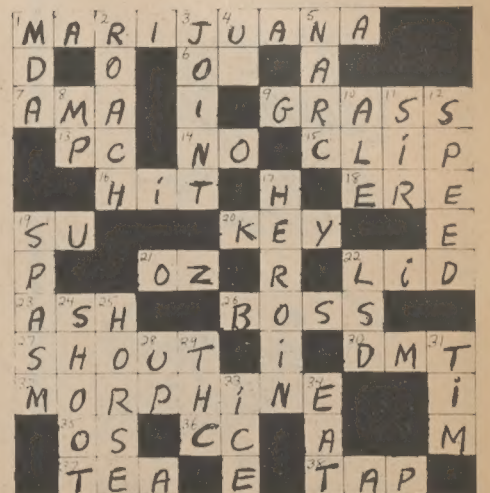
And so with the Stein still stomping on the grape and the Good Christian so diligently trying to pick up the shattered remains of the wine and the grape, enter the Humble Porter with "bags" in hand. He says:

"Hi man! I am the errand runner for the Jock Stock, the disciple of the lost cause."

And with that he dropped the bags he was carrying on the already too badly crushed grape with the grace and finesse of Don Quixote in search of a maiden to rescue. Then with the deftness typical of his style he lept on his horse and rode off madly in all four directions.

Lawrence Beaudry, ed 4
Earl Hjelter, ed 4

A H P
N A U
S S Z
W H Z
E - L
R - W
S O R
T O D



Sickness situation may hamper grid Bear chances

When Dr. Alexander Fleming came up with his miracle drug called penicillin a few years back, little did he know that it might have quite an effect on the chances of a college football club winning a league championship.

Crystal balls in those days just weren't as refined as they are today.

The team in question is Harvey Scott's Golden Bears and the concern centres around the number of mononucleosis cases confirmed or under suspicion in the Bear camp.

At least three were confirmed last week before the club took to the field against Calgary Dinosaurs, while Scott says that at least that many may turn up this week.

The concern lies in the fact that the afflicted numbers include key individuals, those who must perform at peak efficiency in every game if the Bruins are to entertain any hopes of catching top spot in the Western Canada Intercollegiate Football League this season.

Hope for best

"We're discovering more new cases each day," Scott said in his office yesterday. "They're under penicillin treatment now and we can only hope for the best."

The disease affects the blood system and leaves the person with very little strength. Fullback Marcel DeLeeuw was one of the Bears affected before the Calgary affair and he was forced to leave the contest after the first half.

There was some hope last week that the disease might turn out to be only a virus which resembles mononucleosis, but apparently such was not the case.

"We're hoping that those guys can continue to play," Scott went on. "Also, that the rest of the guys don't come in contact with the disease." Mono is transferable only by oral means.

What effect the treatment is having on the players involved will probably be seen this weekend when the Green Machine travels to Saskatoon to tangle with Al Ledingham's much-improved Saskatchewan Huskies.

Bears are 2-0 in WCIFL play (4-0 over all) while Huskies have managed a split in their two league encounters to date. The Dogs clubbed UBC Thunderbirds 21-0 in Saskatoon last Saturday while Bears were administering a 15-7 whipping to Calgary.

Strong runner

Huskies appear to have a strong running attack led by for-



BEAR FLANKER MEL SMITH (RIGHT) SHOWS HOW TO FIND THE HANDLE ON THE FOOTBALL

... but Gary Weisbrot, Don Tallas and John McManus don't believe it

mer Edmontonian Archie Thomson. Thomson played junior ball with Saskatoon Hilltops for the past two seasons, but moved over to the Double Green this season.

Ledingham's club hasn't showed much of a passing attack thus far (only eight yards against UBC) but has relied on the ground game.

For the Bears, Don Tallas is expected to start at the pivot position as his damaged knee seems to have responded well to treat-

ment. Should he be unable to play, Scott would have to do some lineup juggling. Bob Wanzel, the other quarterback, is also under the weather, which leaves only safety Dan McCaffery to fill in.

Middle linebacker Bill Manchuk, who has a chipped vertebrae in his neck will start, as will tight end John McManus another who has been sick in the past ten days.

Tomorrow's game will be

broadcast on CBC Radio at 1 p.m.

Meanwhile, in WCIFL action last night in Vancouver, Henry Jantzen's Manitoba Bisons all but dashed UBC Thunderbirds' hopes of a first place finish by pounding the 'Birds 46-2. The win gives the Herd sole possession of first place with a 3-0 mark, with the Bears close behind at 2-0.

Manitoba moves on to Calgary to tangle with the Dinosaurs tomorrow. Calgary is 1-2.

U. of A.

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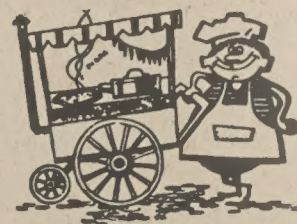
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Pole & Gun with Chuck Tebby

With the help of my friends (and enemies) I will attempt to put out a column of information (and lies) on hunting and fishing.

If you have any material that may be of use to others, leave word at The Gateway sports office. I am also willing to swap information on good spots in return for a small bribe (steaks, fish and the like).

Ducks . . . Good stubble shooting exists in the following areas: Stony Plain, south of Egg Lake, Hay Lakes, and Wetaskiwin. Last Saturday, G. Sterling, P. Rooney, and myself did quite well in the Stony Plain area. Many of the drake mallards have reached their winter plumage (green heads). My good shooting filled the bag while my cohorts filled the air with buckshot.

Big Game . . . Tried for moose in the Whitecourt area on Sunday, with no success. The roads are a little wet in some areas with the odd bad hole. Since the leaves have not completely fallen vision is limited but the few leaves that have fallen make walking noisy. We did see a very fat black bear but let him go in peace. The one deer seen did not wait long enough for proper measures to be taken.

Upland Birds . . . There are lots of grouse this year. Try the Athabasca area for both ruffed and sharptail. On Sunday we picked up a few that were on the roadside feeding on clover (ruffies).

Fishing . . . The local trout lakes are good right now. Very few people on them and the fish should be losing the muddy taste. Star is reported to be fishing well. Take a rod along if you go for big game; on Sunday we could have had a good catch of grayling as they were rising constantly in a beaver pond we passed. Tried for them using a poplar pole for a rod, guitar string for line, and a rather scrubby fly. Results were poor.

On handling birds . . . Clean game as soon as it's shot and you will have better tasting meat. A quick method for birds is as follows. Strip (skin) the bird, remove the crop. Hold the wings in the left hand, put the thumb of your right hand as far down the throat as possible and pull in opposite directions, pushing down with the right hand at the same time. Done properly, you end up with the wings and breasts in your left hand.

Place these in a safe spot (they taste better if handled with tender love and care). Lay contents of right hand down, grab each leg and pull apart. Place legs near the breasts and so as you please with the rest—some like to eat various parts of the internal organs and these can also be salvaged. A few plastic bags are handy for ensuring that the important meat stays clean. By law you must leave at least one wing on the bird until you get it home.

Intramural events finish, continue

Action in men's intramurals continued in full fury this week and last, with two events coming to an end, one reaching the halfway point, and yet another due to get underway.

Turkey shoot

Dentistry led by S. Stokes, first, Melvin Kropinek, third, and Stu Rubla, ninth, captured first place in this event for the second year in a row. Law moved up from their eighth place finish last year to cop second spot. Delta Kappa Epsilon was third, St. Joe's fourth and Phys Ed fifth. Wayne Wesolowsky of Mac Hall was second in the individual category.

Golf

Medicine successfully defended its intramural golf title Saturday and Sunday, finishing ahead of Dentistry, Engineering and Physical Education.

Frank Sutton of Med was low scorer with a 71. R. Chapman of Commerce had a 72 with D. Jones of Phi Delt and Tony Pasternak of Engineering following with 73's. On the seventh hole a contest was held for closest to the pin and was won by Bill Ward of Pharmacy. The longest drive on hole number nine was won by Doug Yukes of Kappa Sigma.

Cross-country

The race will start at 11 a.m. tomorrow and entries will be taken up to 10:30 a.m. The course is all on the roads, starting in front of the Jubilee Auditorium (87 Avenue and 116 Street). No cross-country or track runners are allowed to enter the race so come on out and get some exercise. Even get a police escort! Last year 191 finishers ran—let's try to beat that.

Flag football

Football is now in full swing with 60 games having been

played so far.

Player of the Week: Bill Bradley. He scored four touchdowns and added one single to lead Phi Delt's "A" to a convincing 32-6 win over Upper Res "A."

Spotlight on Division I this week:

League A: St. John's "A" and Delta Upsilon "A" are the two teams to beat here. St. John's demolished Education "A" 22-0 and then squeezed by Mac Hall "A" 9-8. Delta Upsilon crushed Engineering "A" 25-0 led with J. Yurko scoring a pair of td's.

League B: Law "A" led by Dennis Daley and Dave Batchelor defeated Rec "A" and Commerce "A," to lead the league. Kappa Sigma "A," led by B. Bryson, defeated Phi Kaps 35-0 and St. Joe's "A," led by Lampert and Aikenhead, clubbed Recreation.

League C: LCA, led by J. MacSween and G. Plewes, defeated Ag "A" 33-6 and Geology "A" 41-0. Medicine "A" also defeated Geology "A" 22-0, led by Dale Stogryn.

League D: Engineering "A," Arts and Science "A" and Phi Delt "A" should be battling it out for top spot. Engineering beat Apathy "A" 25-0, led by B. Gerard. Arts and Science beat MBA "A" 19-6, led by B. Stewart. Apathy won their second game 22-1 over Upper Res "A."

League E: Dekes squeezed by PE "A" 11-7 on Tuesday in what could be the decisive game in this league. PE "A" had defeated Delta Sigma 8-1, while the Dekes had edged FIJI 18-15. Delta Sigma defeated Pharmacy "A" 19-6.

Entries are being accepted now at the intramural office for squash, handball and racquetball. Registration will continue until the ladders are full.

Calgarians host field hockey

CALGARY—The University of Calgary women's field hockey team will be favored this weekend to retain the U of C Invitational Tournament championship won last year.

The Dinnies will be challenged by teams from the University of Alberta, coached by Sue Neill,

and the University of Saskatchewan (Saskatoon campus) in the two-day event. A double round-robin format will be used to determine the winners.

Action gets under way tomorrow, with Calgary meeting Alberta, and continues Sunday. All games are scheduled for Stanley Park.

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Police dossier intimidates

The following letters were an exchange between Students' Union President Tim Christian and Judge W. J. Haddad, chairman of the Edmonton Board of Police Commissioners.

Mr. Christian's letter of August 17 received no reply after a mid-September meeting of the board. A second letter to Judge Haddad finally elicited the brief and ambiguous response of his September 29 letter.

Note that while the letter does not actually admit knowledge of and responsibility for the photographer, it does imply the police force knew of the situation. What the letter also did not mention was what had been done with the products of the enterprising shutterbug. Supposedly they remain within the confines of the police department.

The assurance that "this sort of thing will not occur again" may be interpreted two ways—either that specific situation will not occur again, or Mr. Christian will not be aware of its existence.

Isn't ignorance bliss?

August 17, 1970

Chairman
Edmonton City Police Commission
City Hall
EDMONTON, Alberta

Dear Sir:

A Teach-In and rally on Unemployment was conducted by The Students' Union of the University of Alberta and several other interested organizations on Saturday, August 8 in Sir Winston Churchill Square. Approval for use of the Square was obtained July 31 from the Supervisor of Facilities for the City of Edmonton Parks and Recreation Department.

It was noticed by several people participating in the Teach-In that a photographer equipped with telephoto lenses had positioned himself across the Square from where the Teach-In was being conducted. During the course of the Rally this photographer busied himself photographing speakers and those people in attendance.

After the Teach-In had concluded, the photographer gathered his equipment and walked across the street into the City of Edmonton Police Department Building. Conversation with several representatives of the Press who were present at the Teach-In indicated that this photographer was not, in their knowledge, a member of the media.

The gentlemen's behavior has led me to conclude that he was either a police officer or a photographer in the employ of the Edmonton Police Department. Was there a photographer assigned to photograph this Teach-In? If so, I believe that some explanation is in order. Surely citizens have the right to assemble and discuss issues of social concern and not be photographed by police officers. The intent of such actions by the police could only be to facilitate the preparation of dossiers on the political activities of individuals in the community. Hopefully this sort of information is not necessary in a society which preaches that the freedom to speak one's mind is an inalienable right.

Your immediate attention to this matter would be greatly appreciated.

Thank you very much.

Sincerely,

TC:jjc

Tim Christian
President
for the Executive Committee
Students' Union
University of Alberta

PLEASE RETURN ALL CORRESPONDENCE TO
THE SECRETARY
LEGAL DEPARTMENT, CITY HALL



EDMONTON
ALBERTA

The City of Edmonton
Board of Police Commissioners

September 29, 1970

Tim Christian, Esq.
President
Students' Union
University of Alberta
Edmonton 7, Alberta

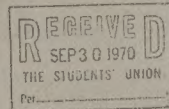
Dear Mr. Christian:

Firstly I would like to thank you for your letter of August 17th and for bringing the subject matter of your letter to the attention of the Board. The point which you made and the position which you have taken in regard thereto are quite validly and properly expressed in your letter and were fully discussed and I believe rectified at the last meeting of the Board. I am certain that you will find that this sort of thing will not occur again.

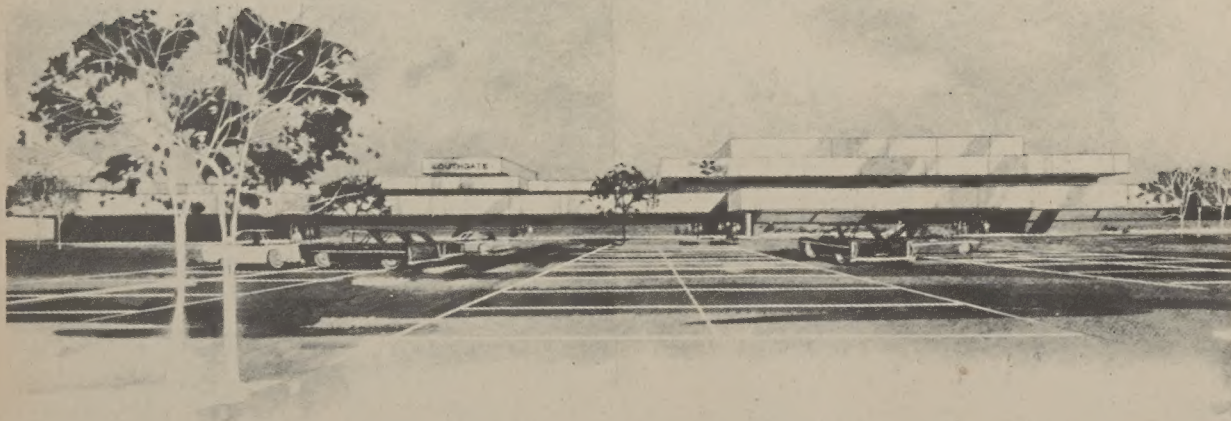
Yours very truly,

W. J. Haddad
Judge W. J. Haddad, Chairman
Edmonton Board of
Police Commissioners

WJH/ds



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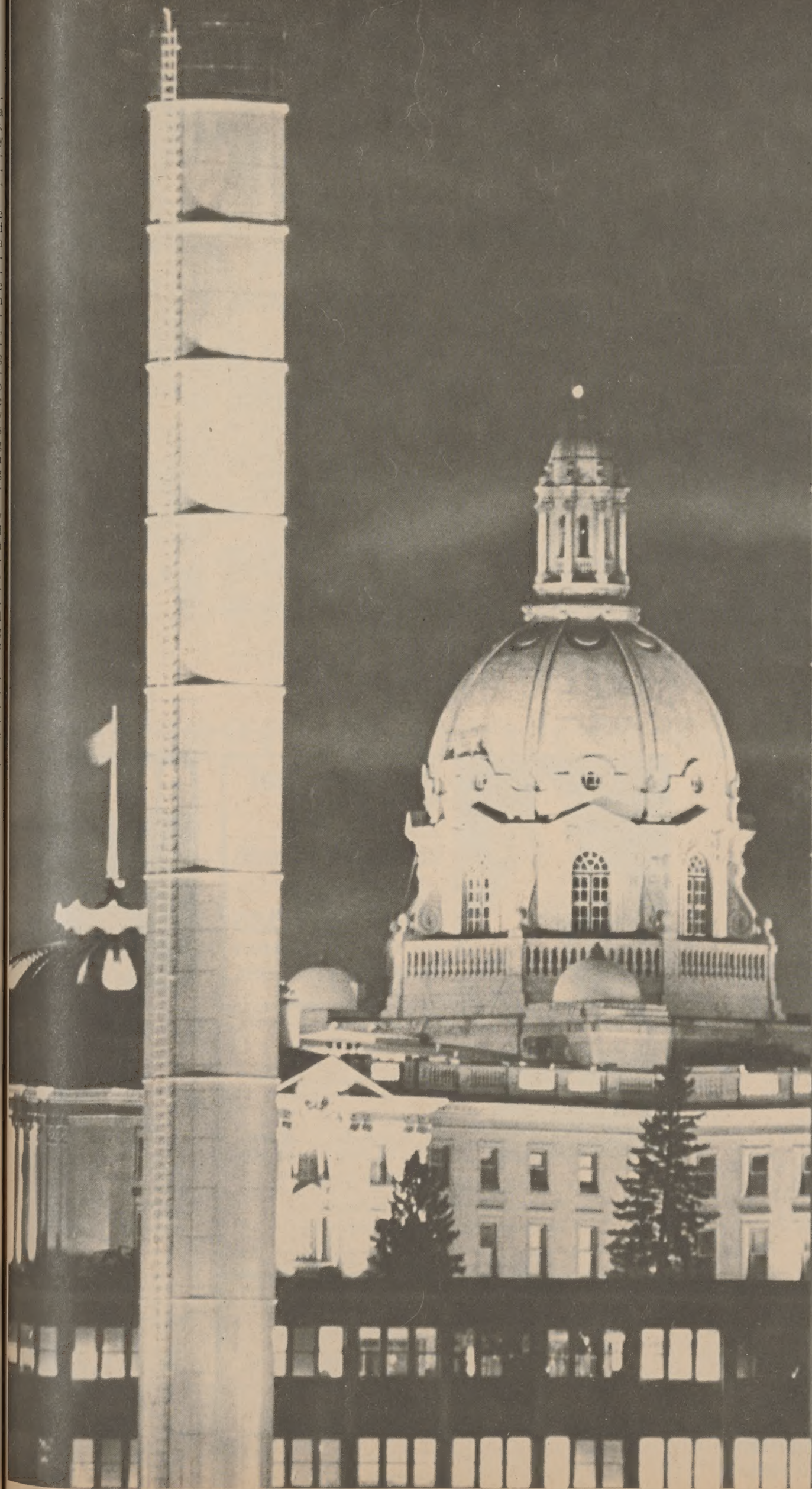


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CASSEROLE PAGE 2

FRIDAY, OCTOBER 2, 1970



"Well Miss Furd, the ban on D.D.T. should make the Bollweevil just thrive."

ED DITS

"Well, we got there and there was a big sign and a chain across the dump saying 'This dump is closed for Thanksgiving', and we'd never heard of a dump being closed for Thanksgiving before and with tears in our eyes we drove off into the sunset looking for a place to put the garbage."

We didn't find one till we came to a side road, and off of the side road there was another fifteen foot cliff, and at bottom of the cliff was another pile of garbage.

And we decided that one big pile was better than two little ones, and rather than bring that one up, we decided to throw ours down. That's what we did".

Arlo Guthrie
Alice's Restaurant

The rest is history, as they say: Arlo got busted for littering, a crime so heavy that even the mother-stabbers and father-rapers wouldn't have anything to do with him.

There was a time when you could just "haul it to the dump" and forget it. But as the garbage piles up outside every town, as rivers and lakes turn into sud-filled deathtraps for fish (and humans, if they

don't have a tetanus shot), it's becoming clear that we are running out of places to put our garbage.

Population appears to be the root of the problem, along with an attitude that "more is always better", and that when things become bad enough, "someone up there will do something about it".

Thus we go calmly along, allowing more money to be spent on Omniplex than on garbage disposal, passing laws without teeth because if government were to really crack down and say "no more factories, plants, etc. until you can show that there will be proper treatment of effluent", the industry would leave and god forbid, our growth rate would slow down.

Because the people who make the rules can afford to move away when things get unbearable, they have no vested interest in a clean environment.

A booming business in real estate has grown up among development companies who have large tracts of non-polluted land in areas of Canada where the garbage has not yet reached ankle-level. Lots can be bought there, and sometimes they will even fly you out at their own expense, and you can view your very clean,

very private, very expensive plot of land, a place to retire to when the rest of the country has gone under a final tide of garbage. But it all takes money, the spur which caused the mess to begin with.

Ecologists have been saying for years that by the time pollution gets so bad that it affects those who are in a position to really do something about it, it will be too late to do anything about the effects of over-population, mis-used resources, wasted water and land. Only if we are willing to make the necessary changes in our life-styles now, will we have a place to live any kind of life later.

This special issue of Casserole is the result of countless hours of research and writing done this summer by a number of Gateway staffers. Special thanks goes to Janice Macphail, who co-ordinated the material and re-wrote most of it in a unique style. Other researchers who deserve credit are Beth Nilson, Jim Carter and Chris Scott. Chris, who worked on chemical pollution, also did an outstanding job of photography, taking all the photos except one and designing the covers.

Where are the leaders?

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GONNA BUILD A MOUNTAIN

... a site for sore eyes

Garbage: a process of elimination

To: His Grace, Director of the Interplanetary Discoveries Division, Ruling Body of the Beloved Sancto.

From: Commander-in-Chief of the Planetary Discoveries and Research Commission.

Your Grace: We have completed our assigned investigation of the planet Earth, looking for the possibilities of inhabitation and take-over of the said planet.

We landed, according to Earth time, in December, 1969. We discovered that the area of our touch-down is known as the City of Edmonton and have confined our area of research to this particular "city".

The planet Earth is inhabited by people (also called humans or mankind). From data which people themselves have compiled on their planet, we conclude that it is very extensively populated with their species (*Homo sapiens*), apparently to such a degree that they cannot provide adequate food and living quarters for all of them.

This, we have unanimously agreed is going to be a major problem on this planet, and even the inhabitants themselves agree that it already is one.

Not only is there a problem of lack of nourishment and shelter for these people, there is another aspect of this particular planet which is depleting it of what resources it does have left.

Mankind is rapidly turning his small planet into an uninhabitable garbage dump. Each human, as does every organism, gives off wastes in order to survive. However, here on Earth, these wastes are by and large left unused. They are simply dumped into the ground, poured into their water re-

sources or pumped into the atmosphere.

The resulting effects of this phenomenon (called "pollution") are just now being discovered by people themselves, and our own findings are presented in this report by the researchers whom I assigned to each area of this vast problem.

* * *

My own research covers the area of waste disposal, a very inefficient process in the City of Edmonton. They have regulations governing the disposal of waste to the following effect:

Waste disposal grounds must compact the waste ("garbage") by mechanical force and cover it with a layer of earth. Another method, called 'sanitary landfill', requires compaction and coverage on a daily or tri-weekly basis. These are regulations set out by the Provincial Government, which has authority over the entire city. However, (and I find this a most peculiar, but apparently not uncommon situation) this authority does not apply its regulations very thoroughly.

You see, any waste disposal system for towns over 5,000 has to be sanitary landfill, and if it is over 20,000 it has to be covered on a daily basis. These landfills are supposed to be covered with at least two feet of suitable soil and seeded to grass. We have discovered that this city has over 400,000 inhabitants, and as such, should most certainly have the latter method of waste disposal.

However, to my great astonishment, I found that it does not even have a sanitary landfill at all! (see picture above) Large metallic objects (most

of which are an archaic means of locomotion still very common here) are supposed to be stacked neatly or compressed to appear less grotesque, but as you can see, most are not.

Upon inquiring into this situation (thinking perhaps the humans were not aware of it), I found the city to be very aware of the state of their inadequate facilities, but reluctant to change it, since it would cost more. (One city official related "Our present dump sites are not operated as true sanitary landfills, so that the price of 39 cents per ton will be doubled when they are operated as landfills.")

I was given some hope for this unfortunate city, however, when I discovered there are plans for a "Garbage Transfer Station" to be installed. (Apparently the first of four or five to eventually eliminate existing garbage disposal sites.) The first station will house a grinder, which will compress waste hauled in on a conveyer belt, at the rate of twenty tons per hour. Once compacted, the garbage will then be disposed of at a landfill site.

Incinerators, (large machines to burn large amounts of waste) are also present in the city, but are also quite unacceptable. The present facility does not have adequate air pollution control, and to add such controls would increase the present cost of a dollar per ton by more than an additional dollar per ton per day. A publication of the municipal government itself, acknowledged, "This incinerator should be changed into a Transfer Station, but left operative as an emergency operation if required."

However, I found out subsequently that their main dumps and the downtown incinerator cannot be phased out until the end of 1973 at the earliest. (By then we shall have returned to our Beloved Sancto and had several years to recuperate.)

I feel I must include one other discovery which I rather regret having made. This concerns a research center of the Learning Institution (the "university"), called the Medical Sciences Vivarium (also called the university farm by residents of the city).

This is an area where the total care of both wild and domestic animals is carried out. Many of these animals are used for experimental purposes and carry pathogens. The waste facilities there consist of a septic tank and a float-operated pump which discharges to a tile drain field. This type of system (called a "lagoon system"), I was told, should be situated where there is no interference with public water supplies. But this area is surrounded on all sides by areas of public residence, and with a lagoon as small as the one present there, there are problems with overflowing.

Since this area is a concern of the university, I went there to inquire about it. I can best conclude my report, with a statement by Mr. D. Wighton of the Genetics Department, "We have to throw out all our out-dated, antiquated, present-day ways of disposing wastes. We seem to be the only terrestrial animal which goes out of his way to dispose of his wastes in water."

J. M.



Water: sold down the river

Here on Earth, water is essential to life, and without it no man, animal, fish or plant could survive. Seventy per cent of the human body's weight is water, and to replenish this supply, a human must drink five to six pints of water daily. Without this, the body cannot continue to function. It is difficult to think of any item used by man which is not dependent, at some stage of its development or manufacture, on water. So it becomes readily apparent that the water they have must be maintained at or restored to a state where it is fit for use by all forms of life.

When water reaches the Earth's surface, it may dissolve organic residues of plant and animal life, and carry these into streams. The organic material in the water provides the nutrient basis for the development of bacteria and microscopic plant and animal life, which in turn is food for successive life stages, which eventually provide food for man (called the "food chain").

No waste material limit

There is a high demand for suitable water supplies, but at the same time, the demand for water systems as a carrier of waste material is also great. Because of the apparent abundance of water in the province, there has been a tendency to ignore or forget that there is a limit to the amount of waste which any water course can absorb.

I was pleased to find that the Governing body of the province had set up "criteria" for the control of water quality. However, upon looking further, I found that these are not legal standards, but simply a means of judging water quality. Another section of the Government uses these to establish standards which can be applied legally.

These regulations apply to moving waters only, such as the "North Saskatchewan River," the body of water which flows through this city. Apparently, once the water leaves the city, the city is no longer responsible for its condition. This is most interesting, since most of the damaging wastes ("pollutants") are disposed of downstream.

As I was investigating this "North Saskatchewan River" one day, I strolled along its banks and for a moment contemplated strolling across the river itself. This brought to mind an interesting point made by a member of the Government, who stated, "Silt is the most serious pollutant in Alberta today, but legislation does not even consider it a pollutant." What it does consider pollutants are: "any solid, liquid, gas or combination of them in water originating from the direct activities of man." (I do not argue with this definition, but do not pretend to have resolved this paradox of definitions within the Governing Body on Earth.)

Sewage treatment plant

Furthermore, I was confused by the fact that the body which can inspect the dumping of pollutants, and demand changes, has no right to levy significant penalties against guilty parties (it can only penalize them by means of a fine of not more than \$500 a day).

There is, I found, a method which this city uses to treat its water before



Charlie Pentax photo

(YOU'LL CHOKE ON THE LUMPS)

turning it back into the source. It is called a "Sewage Treatment Plant." This handles all the sewage and dumping from the area within the city limits, including industrial wastes. Plants and refineries outside these limits have to treat their own sewage and chemical wastes, and these may have a different level of BOD requirements than the city. (BOD, I found, stands for biochemical-oxygen demand, the amount of oxygen consumed while stabilizing organic material).

Treatment inefficient

During the winter, the entire main plant uses primary and secondary sewage treatment, but in the summer only primary treatment is used. This sounded very encouraging, almost efficient, in fact, until I found out what it meant. The primary treatment consists of settling tanks only, while the secondary treatment adds further aeration and employs microscopic organisms to consume some of the settled wastes. No chemicals are used in the plants and only those particles which settle out are removed. With secondary treatment, 80 to 90 per cent of the BOD is reached and in the primary, 30 to 40 per cent is reached. In both cases, the river is depended upon to do the rest.

This plant is meant to handle what is termed a "dry weather flow." This means that it can treat up to 40 million gallons of water, as long as it is not

raining. However, it does rain here, and apparently, there was a lot of rain this summer. This was bothering me quite a bit until I went to inquire about the problem. I found that during a storm, anything over 50 million gallons goes through an overflow tank and into the river directly, without being treated. (After discovering this, it bothered me even more.)

But Edmontonians are progressive creatures, and at last report, plans were in progress to extend the present primary tanks to be able to handle 109 million gallons per day. This will enable the main plant to handle all but major storms, and should be completed by January, 1971.

Smaller plant phased out

Since the main plant is being increased, the city government of Edmonton has decided to phase out one of the two smaller plants. (The main plant handles 80 per cent of the sewage treatment, while two smaller ones handle 10 per cent each.) The sewage that normally would go there is being pumped to the main station, and the planned expansion there will handle this extra sewage.

With the hopes of perhaps helping the Humans improve their water treatment quality, I suggest to them two methods of more thoroughly removing wastes. In some European centres, upstream dumping is in practise so that the

cities must remove their sewage very thoroughly. In this method, the water that is being used for drinking, domestic and industrial use in the city concerned has all the major wastes of that same area, including industrial wastes, put in it before it reaches the city. Needless to say, the wastes must be removed to a level fit for human consumption, and the result is that the water put back into the river is very much cleaner than in the city of Edmonton. It has what would be termed a tertiary quality as compared to Edmonton's secondary. However, it was felt by members of the Government that the costs involved in the extra treatment would not be justified.

I also suggested that a lime and sludge method of removing soap and phosphate detergents would remove them 90 per cent, as compared to the 20 to 30 per cent that is presently removed. But once again, it was felt that the costs were unwarranted.

North Saskatchewan River

This is rather unfortunate, not so much for the city of Edmonton, but for the areas downstream from it. This was my conclusion after resorting to a publication of the Government, which tells of the state of the North Saskatchewan River each year. To quote them, it gives "a general assessment of the

(Continued on p. c-5)



continued from page c-4

extremes of the oxygen depletion along the North Saskatchewan River."

Wastes increase downstream

Various substances are used as indicators of the state of a body of water's health; ammonia indicates industrial and sewage pollution; it is toxic to fish and affects the chlorination of water supplies; coliform bacteria indicate pollution of water and sewage and wastes. This booklet acknowledged my own findings in that the "maximum BOD occurred, as expected, immediately downstream of Edmonton. This was true of most of the substances listed above.

Several complaints were received from downstream users regarding unpleasant tastes in the river. There was a marked increase in the number of bacteria in every constituent downstream of Edmonton.

Man being removed?

The writers of this booklet stated that "These values are considerably higher than the bacteriological Water Quality Criteria as established by the Provincial Board of Health."

I went to investigate this division of the provincial government, since it seemed to have much authority and discrimination concerning the quality of water. I did this by once again reading their publications, this time regarding "Removal of Weeds from Water." (It appears that the only organism which

has not been, or is in the process of being, removed from this planet is man.)

This Act states that certain chemicals (including 2,4-D) are considered safe enough for control of weeds, but may only be used where the body of water does not contain fish, as it gives them an off-taste. (It didn't state what the water tasted like to the fish.) It also stated that other chemicals may be used on areas as long as they are sprayed on the foliage, and that the user must attempt to avoid getting any in the water. The government also allows the use of a herbicide called Endothal, but warns that the body of water should not be used for swimming for 24 hours, and may not be used for irrigation, watering livestock, or domestic or agricultural purposes for seven days after treatment. Fish from waters treated with this substance may not be used for food or feed for three days. This also applies to a substance called Silvex, but in this case, if the application is not uniform, fishkill may occur.

Human Logic?

And here is yet another paradox which I cannot resolve. This same body defines water pollution as: "the presence in water of any pollutant that alters the quality of the water to the extent that it adversely or unreasonably affects the water for any of its beneficial uses." Yet it allows materials to be poured into the river which make it unusable for



EDMONTON'S OL' MAN RIVER

... keeps on rolling to his grave

swimming, irrigation, watering livestock, food source, domestic or agricultural purposes. I am merely presenting what I have found to be true, and I cannot hope to explain to you Human Logic.

They dumped industrial, human and agricultural waste into their massive river systems—beautiful rivers which seemed so powerful, untouchable, indestructible. Multiple thousands of miles of waterways became too polluted to

drink without massive doses of expensive cleansing chemicals—too lacking in oxygen and other life-giving elements to support the life of commercial or sports fish—and finally so loaded with salts and other harmful chemicals that they became unfit even for irrigating agricultural fields. Those streams sluggishly made their way to sea to contribute their deadly 'fall-out' to the ocean.

J.M.

DDT: Do we Deserve This?

It seems that the people of this city are greatly concerned with personal bodily cleanliness. They use masses of chemicals called "detergents", soaps, cleansers and various other such names. These are used to cleanse the human body and its clothes. They cleanse to the extent that the products they use in cleaning are being dumped into their rivers in such quantities that they are polluting the rivers.

They have not, however (at my last investigation), come up with anything to take the "cleansers" out of the river. (I found that the definition of "cleanser" was rather ambiguous, as it is used to describe something which takes dirt off humans and out of their clothes, but in themselves, cleansers make the rivers dirty.)

Many of the detergents contain phosphates, and this has recently caused a lot of concern amongst

people. Many stores in Edmonton display charts showing the phosphate content of the detergents they sell (see photo). The reason for the concern is the fact that phosphates in detergents make good nourishment for algae in lakes.

Algae like it so much that they multiply at the expense of everything else, and this results in "eutrophication". (Defined as the 'enrichment' of water by nutrient salts. These salts

may come from sewage, but this could be prevented. Tertiary sewage treatment can remove phosphates fairly easily, but the humans here seem reluctant to use this method. The effect of nutrient salts is to hasten the growth of undesirable algae, which use up all the nutrients in the water, and which, when they decay, lead to the deoxygenation and death of fish.)

Money is a stumbling block

Phosphates are used as a "builder" in detergents, as humans seem not satisfied that they are clean, but have a keen competitive spirit to be "cleanest". Possible replacements are readily available, but these are usually more expensive (this seems to be the halting point of most suggested improvements here on Planet Earth), and sometimes not as efficient. Some detergents in the stores use a nitrogen-based compound instead of a phosphate-based one, but nitrogen serves just as well as a food source for the undesirable algae.

This reminds me of an event taking place, apparently all over the large land mass in which this City of Edmonton is located. This peculiar event is the replacement of phosphate-containing detergents with what are called "bio-degradable" detergents.



WHITER THAN WHITE! CLEANER THAN CLEAN!

... makes the rivers greener than green

continued on page c-6



continued from page c-5

This name sounds, I will admit, very impressive, and it even had me convinced for a while that it was a definite improvement in the "anti-pollution drive". But, as usual, upon investigating further, I found that this simply means that the phosphates are still present in the water, but there are no suds on top of the river. This seems to satisfy some humans, as they believe that as long as they can't see it, it can't be there (they even have a phrase to describe this phenomenon, since it is so common—"Out of sight, out of mind.")

Overproduction of waste

I also found that the phosphates are just one of many chemicals used for every imaginable purpose. Actually, I made a most interesting discovery while analysing my findings on the use of chemicals here on Earth.

There are large numbers of people who cannot get what they want or need in sufficient quantities to be satisfied (although this level is ridiculously high for some individuals in my opinion) so they have set up a "Chemical Industry", which is devoted to making these products. Usually, they make more of these artificial products than is necessary, and then spend a great deal of money on convincing humans to spend more money to buy them.

Ultimately, (and this is once again, most confusing) these large industries are producing so much

material that they are creating an excessive amount of waste and they are polluting their remaining natural resources. With this further draining of the natural sources, there is an even higher demand for artificial products and the cycle continues. I can only speculate that it cannot go on much longer, as the natural resources will soon be completely drained, and it will then be very difficult even to manufacture artificial goods.

Infiltration of food chain

Many of the chemicals produced by Industry remain in the environment for a very long time. These substances are often disposed of by mixing them into the rivers or even into the oceans at levels which appear to be completely "safe", only to be concentrated at dangerous levels by living organisms (through the food chain).

Excessive use of DDT

The most common of these are the insecticides, and DDT in particular. Traces of insecticides are concentrated by fish, and they can be found all over the world—in rain, in Antarctic snow, in all forms of wildlife and even in man. The amounts are usually small, and almost certainly they have no harmful effects on the animals whose tissues are contaminated, but these pesticides tend to reappear unexpectedly at alarmingly dangerous levels.

The ecosystem (the Earth's life-



DDT

... sure makes the "crops" grow, don't it!!

supporting elements) presently has about 1 billion pounds of pesticides in it. These remain active for a long time, and once put into the ecosystem they remain in use.

The public has recently become concerned over the excessive use of DDT. It seemed to be a very representative member of the pesticides and so I inquired into its origin and

uses here. I found that it has a chemical name of "chlorinated hydrocarbon", which means that it is related to dyes and may be termed a colorless dye. It was first discovered during the Second World War and was originally developed for the control of lice and typhoid. As do other dyes, it adheres to textiles and is very persistent, both of which made it effective in epidemic control.

DDT most persistent

Recently, organo-phosphorous compounds have been used as substitutes for DDT.

These replacements are, however, less persistent than DDT, and this is one of the main problems with this substance. It has a half-life in the soil of about ten years, after which it breaks down into DDE, which is non-toxic to insects.

Insects are the main target of pesticides, as they are considered "pests". However, these creatures are only pests to man, and are certainly not bothering the rest of the Earth's many inhabitants. If they are, the ecosystem handles them just as effectively, although not as quickly or as permanently.)

Increases in concentration

DDT has an affinity for fats, which is one of the reasons that it is so dangerous. It is passed from one organism to another up the food chain and increases in concentration as it does so. This does not, as yet, cause a direct problem for man, but it has been found to impair reproduction in birds who have been eating



BLOWIN' IN THE WIND

... some call it the smell of money

continued on page c-7



continued from page c-6

insects poisoned with DDT. They produce thin-shelled eggs, or eggs with no shells at all, as DDT interferes with the laying down of calcium (which hardens the egg shell).

The effects of this on the second generation does not have to be stated, and the extinction of such species as the peregrine falcon is already a possibility. This will have a very profound effect on the food chain if it continues, and will almost certainly lead to the extinction of man, who depends for his survival on stable linkage within the food chain.

Some insects immune to DDT

After 10 years, when DDT has become DDE, although it is non-toxic for insects (the intended victims), it still has the same effect on birds. DDT was originally considered a nearly perfect substance for pest control, but certain parts or members of insect populations are naturally immune to it. These members, of course, survive and produce a second generation, which is totally immune. The results of this are obvious. The insects survive the contamination and actually thrive quite well once the second generation is established.

Use of new chemicals

Yet pesticide is established in the ecosystem for a very long time, and it ultimately harms the birds (the natural predators of the insects). This results in reduction of bird populations, which lessens the number of natural predators of the pesticide-resistant insects with the ultimate result of more insects. This is quite the opposite of the desired effect and man is now faced with a much more complex problem than the one with which he started.

One "solution" that has been implemented is the use of new chemicals for the new strains of insects. In Edmonton DDT was replaced by members of the organo-phosphorous family for use in mosquito control. Although not as dangerous as DDT (they are used in smaller quantities), they are short-lived and more expensive. However, their use was quite effective, and this has pleased city officials very much (no report was available from the mosquitoes).

Fish mercury contaminated

Fungicides, mercury - containing compounds used for the treatment of grain, are often mixed with insecticides for seed-treatment prior to planting, as an insurance policy against disease. Mercury compounds are not bio-degradable and consequently stay in the ground a long time or are washed into the rivers.

The World Health Organization (WHO) has set the safe level of mer-



INDUSTRY EXHAUST ITS INGENUITY

... with gorilla warfare on pollution

cury in foods at 0.05 parts per million (ppm), but the Canadian government has set it at 0.5 ppm. Fish from the North Saskatchewan River have from 0.64 to 0.75 ppm.

Nobody eats fish from the North Saskatchewan River anymore.

Tons of emissions enter air

Unlike rivers, lakes and oceans, air masses do not respect such man-made boundaries as provincial lines or international boundaries. There is nothing unusual about air pollution; but it has become part of the natural life cycle of the Earth. Each year, millions of tons of emissions enter the atmosphere from both natural and man-made sources. The amount contributed by the inventions and activities of modern man constitute a mere 0.5 per cent of the total, but that amount causes the problems of reduced visibility, irritated eyes and throats, damaged property and various health hazards.

Pollutants from many sources

The bothersome pollutants range from asbestos to zinc, and come from a variety of sources such as iron and steel mills, paper and pulp operations, petroleum refineries, and chemical plants; from community operations such as garbage dumping, trash incineration, from power generating

facilities; and from cars, trucks and jets.

The chemicals that find their way into the air are fairly simple in themselves, but their reactions and interreactions when subjected to the atmospheric environment can be very complex. A good example of this is "smog," which is formed through a series of sunlight-initiated reactions. These reactions also form peroxyacyl-nitrates (P.A.N.'s), suspected of being the principal cause of smog's eye-searing effect. They can also bring about visible damage to crops even when present in the parts-per-hundred-million range.

Weather influences pollution

The chemical make-up of the atmosphere determines the degree to which it is polluted. However, weather conditions that prevail at any particular time, as well as the topography of the area, have a marked influence on the effects of pollution. Edmonton is particularly bad in the winter, when a blanket of pollutants is held over the city by the ghastly weather conditions.

Potential health hazards

Airborne particles like asbestos may lead to several respiratory diseases such as lung cancer. Apart

from being potential health hazards in themselves, minute particles of asbestos absorb molecules of gases such as SO_2 . When inhaled, the particles with the absorbed gas can lodge deep in the air passages of the lungs, where they cause severe irritation. Asbestos spray techniques are used for insulating buildings as well. It is unfortunate that buildings cannot also be insulated against pollutants.

One of the biggest polluters on this planet is the automobile, which spews out such chemicals as hydrocarbons, carbon monoxide and oxides of nitrogen. Lead is often used as an anti-knock device, and although there are advantages and disadvantages to this, it is a fact that lead expelled into the atmosphere is unhealthy, not to mention lethal.

Use of other fuels

Many people are actively concerned with searching for ways of avoiding this problem and one of the methods suggested is use of other fuels—compressed natural gas, steam, electricity, and gas turbines. A possible solution to Edmonton's automobile pollution problem would be a rapid transit system. My own suggestion of elimination of the ETS was vehemently rejected.

C.S.



Air: the bre

When first approaching this planet, we noticed the unusual amount of vapors present in the atmosphere surrounding it. Investigating further, I found that the inhabitants had dumped tons of evil-smelling particulate matter, which corroded and besmirched everything it touched, into the air until each city had its own pall of smog that signalled its presence to us even deep in space.

Smoke most common problem

Air pollution due to smoke is the most common problem faced by cities, and is the most easily recognizable since it contributes the most to limiting visibility. It is the result of incomplete combustion, and consists of minute particles of carbon which remain suspended in the air.

These particles are largely from one source, the automobile, which is a very common form of the internal combustion engine. Engines are run by burning of an air-fuel mixture (the fuel usually being a hydrocarbon such as gasoline) to create pressure and drive the vehicle. When in operation, these vehicles produce several kinds of pollutants, most of them poisonous.

Unused gases harmful

Some of the emissions are still unburned when they enter the atmosphere, and consist of about 80 per cent unburned air-fuel mixture and about 20 per cent other by-products—water, carbon dioxide and carbon monoxide. Not only do these substances harm the air outside the vehicle, but if allowed to remain in the engine, they can also

harm it by forming varnish deposits, acids and sludge.

However, since 1960, all vehicles have had special equipment installed in them to return the unused gases to the engine, where they are burned just like the original fuel. This means the vehicle will last longer, and it also means that it produces more pollution in the form of exhaust. But, to most people, it is more important to have a good "set of wheels" than a good set of lungs.

Some progress has been made in controlling exhaust emission by a number of methods. One of these is to increase the efficiency of the engine itself, and another is use of "afterburners." Afterburners are devices installed just behind the muffler which burn up the exhaust gases with heat created by a chemical reaction.

Afterburner drawbacks

The two major drawbacks to the use of these devices are that they are fairly expensive and they usually require non-leaded fuels. Cars will have to be redesigned to install pollution-preventing or pollution-controlling equipment, and I have found from my short time here on earth that man does not like to admit his mistakes, much less pay for them.

Standard Oil "solution"

The use of unleaded fuels seems to be the one most probable "solution" to auto-induced air pollution in this city. People seem more willing to pay an extra one to five cents per gallon for



PURPLE HAZE RUNNING THROUGH T
... waiting for the

the non-leaded gas than larger sums for the installation of more elaborate equipment.

Another interesting "solution" comes from the Standard Oil Company. It claims to have come out with an additive to gasoline that will lessen air pollution. (They call this product 'F-310'.) However, it "showed no significant changes in emissions of pollutants" when tested on 61 normal cars by the California State Air Resources Board. The only changes occurred when it was tested on dirty engines, not clean ones.

F-310 only hides pollution

Furthermore, the only changes it makes are in the visibility of the pollutants. (Rather than try to prevent pollution in the first place, they take half-way measures to hide the fact that it even exists.)

Air pollution is being created not only on the ground, but in the air itself. Aircraft fly continuously through the stratosphere, trailing behind them long streams of such gases as CO₂, CO, nitrogen oxides and water vapor.

Surprisingly enough, water is actually the most dangerous of these. It could, in sufficient quantities, change the radiation balance of the earth; initiate cloud formation and increase the amount of solar energy reflected into space; and decrease the ozone concentration, allowing more ultraviolet radiation to reach the earth's surface.

Dust, another seemingly innocent substance, is actually a pollutant.

Wind-borne dusts, salt sprays and lenses are natural contaminants of the atmosphere, creating a haze than often seen in the country-side. In industrial areas, such as cities, dusts produced by combustion and such processes as crushing, grinding and demolition. It may cause respiratory diseases and may contain poisonous substances such as lead.

Dust may cause disease

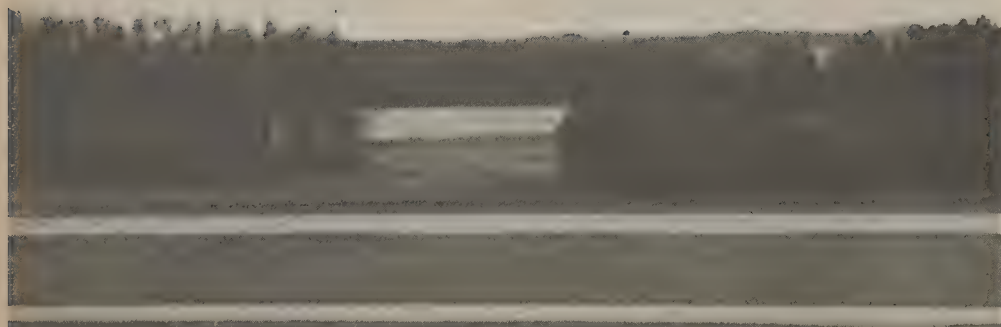
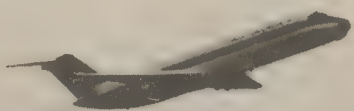
Damages incurred from air pollution range from allergies to metal corrosion, affecting people both directly and indirectly. In Alberta, two of the most offensive gases (sulphur dioxide and hydrogen sulphide) originate in the petroleum industry. They can cause metal corrosion and paint deterioration, as well as being the most common air contaminants poisonous to vegetation.

Vegetation a double bonus

Mankind doubly affects his environment when he damages vegetation. Plant life is the one natural source of necessary oxygen, and one of the few populations on earth that utilize carbon dioxide. If people continue to destroy vegetation, whether considered useful or not, there will only be a shortage of oxygen production, but an increase in the amount of CO₂ in the environment.

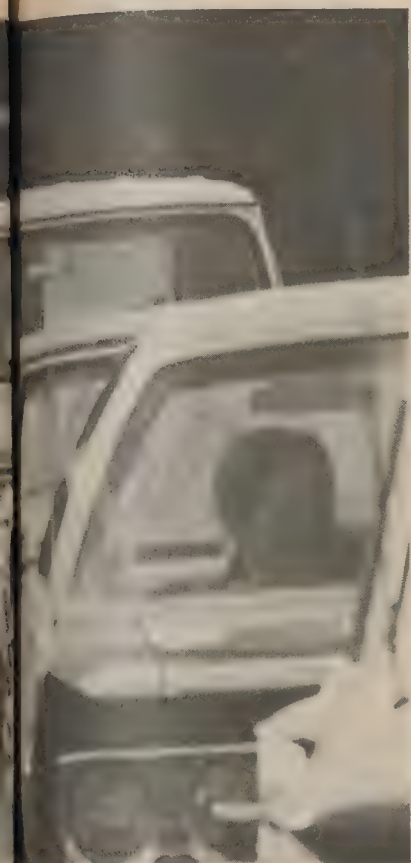
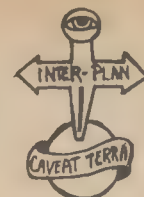
Together, these two effects of pollution could literally smother man with his own wastes.

Aware of this threat to human health, the Province of Alberta has set up



WHAT GOES UP
... must come down—all over the countryside

th of death?



proved by the board, and existing ones were given five years to comply with the regulations.

I suppose industries were given that much time because the check-ups carried out on them are done mainly by the astonishing number of two (count them—2) mobile labs in use throughout the province. They are used especially around gas processing plants and sour gas field areas (which must be most of them from the ones I've smelled). A number of larger gas processing and sulphur recovery plants in the province carry out their own program of monitoring and then submit their reports.

Exposure cylinders on guard

However, not to be outdone, the board also has permanent field monitors present in the form of exposure cylinders to measure various gases. They are exchanged monthly and the results analyzed.

Follow-ups are also made through periodic measurement of emissions (in the case of larger sources this is once a year), and by monitoring the area for the specific contaminants involved. (Air pollution is defined generally as the presence in the outdoor atmosphere of any contaminant in quantities that may cause discomfort to persons or en-

danger their health or safety, or that may cause injury or damage to property or animal life.)

Some of the standards set by the board are for smoke (limits to duration and density in rural and urban areas), odorous materials ("as an effect standard as to use and enjoyment of property, health, or safety of the public"), toxic or noxious materials (written approval which is calculated on the maximum ground level concentration) and mercury.

Mercury comes from chlorine and caustic soda plants, and is discharged in its metal form. Under certain conditions it can be converted to organic compounds by micro-organisms and in this way enters the food chain. Companies have been instructed to reduce their production but there are at present no accepted standards in use as guidelines.

Dustfall stations gather info

Monitors are set up in the cities of Calgary and Edmonton, and yearly reports are described in a survey booklet published by the government. In Edmonton, there are eight dustfall stations which measure total dustfall as well as per cent calcium in the dustfall. The Provincial Board of Health considers a particulate fall of 15 tons

per square mile per month in residential areas, or 45 tons per square mile per month in industrial or commercial areas, to be excessive.

At one of the stations, however, the yearly average dustfall was doubled and a high of almost 64 tons/sq. mile/month was recorded. The government explained that this was due to construction in the area.

Dustfall amounts increasing

The total amount of calcium in the dustfall increased to a value of 23 per cent, and all stations had increased fall values. (The worst of these was 81 per cent, recorded in the fall. I have not quite figured out whose "fall" they are referring to.)

The results of the tests for sulphation levels showed an increase at all the stations. In fact, some of the stations had the highest yearly averages recorded to date. However, "the respective reported averages are well within what most authorities consider to be acceptable levels for the area of consideration." Apparently, "The overall increase may be attributed to the higher frequency of east winds this year." I gather from this that as long as the sulphur is still within range (even though it is increasing), and as long as it comes from somewhere else, the residents have nothing to fear.

Somewhat more frightening, though, were the results of the total oxidant level in this city. The yearly average was the highest reported to date, and was 48 per cent higher than last year's recorded level. The peak figure was 22 pphm (parts per hundred million), recorded in July. However, the writers of this government report assure readers that "this mean is still an acceptable level" and, "It should be noted that of the total hourly readings, only two were in excess of the 15 pphm maximum concentration recommended in the State of California."

Significant yearly increases

I have my own opinions about these statements, but in all fairness to the writers, I shall simply state their own conclusions. "All pollutant measurements indicated that there is not a general pollution problem in the city of Edmonton. On a yearly average basis, most pollutant averages have increased. Significant yearly average increases were recorded by total oxidants and the total hydrocarbons. Even though most levels have increased, they are for the most part not at levels which could cause concern."

Not yet, anyway.

One area where people can become concerned is at the individual (or as

ould kill you

ns of checking upon the quality of air. In 1961, regulations were laid down by the Provincial Board of Health stating that plans for new industries or incinerators had to be ap-



ON A CLEAR DAY

... you can see for several yards

continued on page c-10



continued from page c-9

they call it, "personal" level. The responsibility of the individual in air pollution control is not as remote as it may seem at first glance.

Most people, when they consider air pollution, think of the automobile, the smokestack, or the trash burner. Few point to a most damaging source of air pollution—the cigarette.

One of the most toxic products of the automobile is carbon monoxide. Exposure for one hour to a concentration of this gas of 120 ppm commonly leads to dizziness, headaches and sleepiness. Concentrations as high as 100 ppm often occur in garages, in tunnels and behind cars. Such concentrations are tiny in comparison with the 42,000 ppm found in cigarette smoke.

The smoker survives because most of the time he breathes air not so heavily polluted. However, in a poorly ventilated, smoke-filled room, concentrations can easily reach several hundred ppm, thus exposing smokers and nonsmokers present to a toxic hazard.

As well as carbon monoxide, cars issue nitrogen dioxide, an acutely irritating gas. Concentrations of 5 ppm are considered dangerous, yet cigarette smoke contains 250 ppm.

Many of the toxic agents in cigarettes do not have counterparts in ordinary air pollution. One of these, hydrogen cyanide, is highly active against respiratory enzymes. Long-term exposure to levels above 10 ppm is dangerous. The concentration in cigarette smoke is 1600 ppm.

The principal effects of smoking are borne by the smokers themselves. They pay for their habit with chronic disease and shortened life. Involved are the individual's decision and his life. However, when the individual smokes in a poorly ventilated space in the presence of others, he infringes on the rights of others, and becomes a serious contributor to air pollution.

Although not considered a pollutant, sound also travels through the air. Could sound waves be seen, they would probably fill the atmosphere to a degree that could create "visual" as well as "audio" pollution.

To prevent such an occurrence,

the city officials have created laws governing noise levels. They have modestly set the maximum noise allowance between 80 and 90 dbA's (measures in decibels) for trucks, motorcycles and city equipment. The latter is allowed the maximum (90 dbA's), when it is being used to build roads, or to grade, sweep or clean

them. Fines for violation of this act are set at not more than \$500 for each offense.

Fortunately, we shall not be bound to such a law when we depart from this hopeless place, for we shall leave silently, in the spring.

J.M.
J.C.



A SOUND SOLUTION

... to noise pollution: an electric bus

Radiation: no concrete solution?

Like sound, radiation constitutes an unseen portion of the atmospheric environment that could potentially harm human and other forms of Earth life.

People receive as much as 0.15 rads per year from natural sources such as cosmic rays. (A "rad" is the "radiation absorbed dose".) The safe level established in the United States was set at 0.17 rads per person per year.

Several "man-made" sources contribute to the amount of radioactive waves present at any given time. This includes such things as color television, X-rays, nuclear reactors, etc. An excess of radioactivity in the air, or in a person's system, can cause an increase in susceptibility to cancer, gene mutation, and bone defects.

Once a person is overexposed to radiation, the symptoms show up readily—sickness of the stomach, a lowering of the blood count, deterioration of the lining of the digestive tract and severe intestinal bleeding. Later effects may be sensitive eyes and even cataracts. When a person is overexposed to radioactivity, he must be immediately isolated and treated with antibiotics and cortizone. In some cases bone marrow transplants may be required from a healthy donor. (If they can find a healthy donor.)

In Edmonton, the largest source of radioactive material is the university's Nuclear Research Center. There are monitors throughout the nuclear physics plant, and a concrete shield is used to protect the staff. Workers also wear a badge which has a monitor in it, and these are sent to the Department of National Health and Welfare each year. The badge, once treated, can show the amount of radiation to which each man has been exposed.

There are two methods used by the university to dispose of radioactive ma-

terials. Small amounts of radioactive solutions are diluted with water and poured down the drain. (They seem to feel that dilution is the solution to pollution.)

(I was surprised to find that there are only three radiation monitors along the river. These do not give very fine readings, and not one of them is located near the university.)

More dangerous radioactive ma-

terials are sealed in plastic containers and kept in a concrete vault until they can be sent to Chalk River, where they are disposed of by "qualified personnel".

At Chalk River there is a large area of Crown land (fenced-off waste land) where the materials are buried in metal cylinders, or "piles". Occasionally one of these piles explodes. This creates a problem, because no one wants

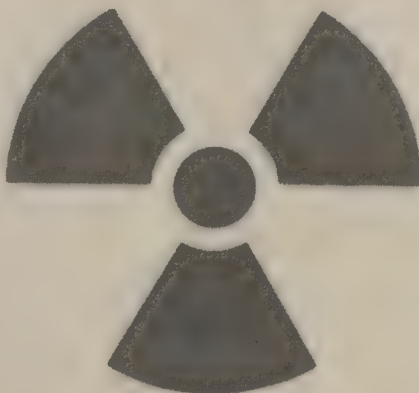
to go in and remove them.

I can certainly sympathize with this reluctance, knowing the possible effects of radioactive materials and the length of time that most of them remain active.

True, some elements have a life of less than a second, but most last much longer than that, and carbon 14 (used widely in research) may last for millions of years. (People should be so lucky.)

B.N.

DANGER



RADIATION AREA

C'MON IN

... and get mutate-ated

The sky above The crud below

Your Grace: Upon completion of this survey, the staff has unanimously agreed that this planet is uninhabitable by our fellow beings.

At one time, invasion of Earth might have proven worthwhile, for they, too, had pure, refreshing air; clear, running waters; fertile soil and massive areas of natural beauty.

But man has spoiled himself and his only home by being either too lazy, too selfish or too stupid to realize that he has been sacrificing his own survival (or that of future generations of life on Earth) for the sake of his immediate needs.

This planet is dying, and it is taking its inhabitants with it to its grave.

We have no desire to join them along that stinking, smoky, putrefying path, and with your permission we now return.

J.M.

There really ought to be a law!

By Dan Jamieson

Governments in Canada did not wake up to the seriousness of the pollution threat until the Canadian public kicked it into awareness.

In spite of tons of evidence showing the dangers of pollution, no government in Canada would touch the issue because of the dangers of frightening major business interests out of the country. It was not until people started writing letters to Members of Parliament and Legislative Assemblies, writing letters to newspapers and voicing their protests through organizations such as STOP (Save Tomorrow/Oppose Pollution) and Pollution Probe that the government began to show concern over pollution problems.

The fact that young radicals in the United States and Canada first espoused the pollution issue retarded the growth of anti-pollution crusades for a while. Conservative individuals and governments dismissed the problem as another unreasonable radical complaint.

Government set no real limits

It was not until 1961 that the Alberta government introduced an amendment to the Provincial Board of Health Regulations to deal with pollution. This Act sets almost unreachable limits on the amount of solids a company can pour into the air, provides for no set punishment of offenders against the regulations, and includes such clauses as:

"The board may vary the specific limits respecting particulates and smoke where the board is satisfied that such variation is in the public interest due to location, permanency of the operation, specific estimated effect of the air effluent or other factors deemed to be pertinent."

This means that a company making a major contribution to the economy of the province can get away with ecological murder.

The Act states that the amount of smoke being dumped into the air will

be determined, not by the quantity of smoke being given off, but by its opacity. The degree to which the effluent irritates the nose and eyes of people living in the area has been suggested as a method of measurement almost as accurate, and closer to the issue.

Re-enforcement of anti-pollution law until recently has been at best spotty. The violation of anti-dumping legislation has been greeted in the past with light fines—small enough to offend no one and cheaper for the company or town responsible for the pollution to continue their illegal practices rather than go to the trouble and expense of cleaning up their effluents before dumping takes place.

Litter-bugs, in the meantime, were being threatened with \$100 fines.

Coupled with the government's desire to offend no one comes the problem of defining punishable pollution when enforcement of pollution regulations is discussed. The Board of Health in Alberta defines air pollution as:

"the presence in the outdoor atmosphere of any air contaminants in quantities that may cause discomfort to persons or endanger their health or safety, or that may cause injury or damage to property or to plant or animal life."

Though human discomfort is readily observable near pulp and paper mills, and plant and animal life is threatened by strip mining operations in Alberta, neither type of operation has been seriously attacked by government officials for their negative contribution to the ecology.

Difficulties in definition caused Edmonton's anti-noise by-law to be declared "unenforceable" by city police. The by-law, passed on the theory that noise is a form of pollution that is both uncomfortable and unhealthy, defines noise in terms of decibels rather than content.

The case which finally had the law removed from the police books was one

in which a woman complained of the noise being made by a rock band down the street from her home. The band claimed that its "noise" was music. The police weren't sure if the sounds were "music" or "noise," and dropped the case and the law from their books.

However, the need for strong, clear legislation in the area of pollution control is slowly and painfully being recognized by Canadian governments as citizen protest groups spring up across the country.

Phosphates restricted

During a period of public concern over the high levels of phosphates in Canadian lakes and rivers which kill off fish and plant life in the streams and make the water from the lakes increasingly unfit for human consumption, J. J. Green, the federal minister in charge of natural resources, put forward the Canadian Water Control Act. This Act attempts to regulate the ever-increasing pollution of Canadian waterways. Its chief clause restricts the amount of phosphates allowable in detergents, cutting the detergent's phosphate content down from over 30 per cent to a maximum of 12 per cent by weight.

Unfortunately, the growing army of housewives in Canada will soon nullify any gains on the phosphate front, and will leave the government—and the fish—right back where they started. Gains may also be nullified as housewives turn to the so-called non-phosphate detergents, whose active ingredients are about the same as phosphates so far as fish and plant life are concerned.

The public furor over the use of DDT pesticide (which follows Rachel Carson's *Silent Spring* by less than two decades) may have come too late for some species of wild-life, but received a gratifying response from the federal government. Federal agriculture minister Bud Olsen banned the use of the pesticide for all crops but tobacco.

It has been pointed out that land

used for the growth of tobacco one year will be turned to the production of market gardens during the next crop year. DDT used on last year's tobacco crop will remain in the soil and be absorbed by this year's vegetables. In fact the DDT from the last ten years will have built up in the soil and will be present in the produce of the market gardens. Efforts to have the vegetables taken off tobacco land labelled with their possible DDT content before they go to market have thus far met with little sympathy from the federal government.

The ban on DDT and its derivatives by the federal government still allows the use of over 20 other pesticides and herbicides which are non-biodegradable. These chemicals will either duplicate DDT in building up to a fatal level in plants and animals or, at best, complicate and aggravate an already dangerous situation. The federal government, however, has "declined to leave the farmer totally defenseless against the ravages of insects, weeds, and plant diseases."

Mercury poisoning

Pesticides containing mercury were shelved along with those using DDT as their active ingredient by order of the provincial government. The discovery of mercury in upland game birds in quantities sufficient to cause mercury poisoning in the hunters who shot and ate them prompted the move.

Over ten years ago Norwegian scientists discovered the dangers of mercury poisoning from pesticides similar to those endangering Alberta hunters. Ecologists managed to get their government to ban mercury pesticides and to inspect the effluents of any industries using mercury in their processes. Unfortunately the Norwegian government's action in this regard had little impact on the Canadian government; a number of people had to suffer from mercury poisoning before that substance was removed from the market.

Chemicals outside the realm of agriculture have also come under public attack. The most recent victim of the public's wrath has been oil. The break-up of Aristotle Onassis' tanker Arrow in Chedabucto Bay brought cries of helpless anger from people all across the country, and caused Albertans to thank their lucky stars that such an outrage could never occur in an inland province.

Athabasca oil spill

Less than six months later a pipeline on the Athabasca river sprang a leak, sending an oil slick out over the water, killing fish and threatening wild-life in the entire region.

Public concern over any re-occurrence of the leak caused the province's Environmental Health Department to promise a more active role in the routing of pipelines (the submissions of plans for proposed pipelines was hitherto considered to be a mere formality), and the Oil and Gas Conservation Board's power to police oil exploration operations was brought into play for the first time.

Four Swan Hills oil operations were closed down and over 20 others were told to "clean up or colse down" by the Board, which accused the operators of "sloppy house-keeping" in allowing massive oil spills in their areas of exploration. Following the lead of the Alberta Fish and Game Association, which cited 15 of the oil soaked sites in a report to



A MONUMENT TO VISUAL POLLUTION

... but is it Bio(sigh)degradable?

continued on page c-12

There really ought to be a law!

continued from page c-11

the provincial Health Department, the Board examined several exploration sites in Alberta, and plans to hit all of them by the end of the summer. The Board says it will come down hard on the negligence responsible for the creation of "a potential ecological disaster area in Alberta."

The Board is presently involved in the drafting of more stringent regulations governing oil explorations. The new regulations are expected to go before the Legislative Assembly in the fall.

Both the provincial and federal governments are taking precautions against the growth of pollution, but the legal approach to the entire question is still vague.

The problems raised by pollution have until recently been handled almost exclusively by the civil courts. Canadians with the time, energy, and money have been able to take their pollution gripes to the civil courts with fair assurance of winning compensation for disease, discomfort, or property damage brought on by pollution—if they can trace the source of that pollution.

The courts will force the offending company or individual to pay for medical expenses or property damage, but there satisfaction ends. The offenders will receive a reprimand and be told to clean up their operation within a given period of time, often as high as three years. Those three years can be stretched into ten or even more by the endless rounds of Canadian appeal courts, and the individual pressing the suit will have to wait until it is all over before receiving his settlement.

Definite set of regulations

The creation of a definite set of regulations governing pollution and punishments for their contravention would reduce these frustrating and time-consuming legal hassles. But before such a scheme can be worked out, some questions must be answered.

- Who is responsible for pollution legislation; the federal government? the provinces? or both?

- Should the question be handled by those government departments directly concerned with the pollution (Agriculture to tackle pesticides and herbicides, Natural Resources to handle water pollution, Industry to take on air pollution), or should a new ministry be introduced to check on all forms of pollution, from water and air pollution down to littering?

- Who should be called upon to make sacrifices in the anti-pollution battle, industry, individuals or both.

- How far can the government go in policing pollution without interfering with the rights of individuals and corporations?

- Would pollution control favor the big businessman over the independent operator, forcing the businessman working on a small profit margin to close his doors? Would any allowance be made for the small businessman?

To many people concerned over pollution, the questions pertaining to businesses no longer apply. The time has come, they say, for Canadians to make the economic sacrifices which the war on pollution will require. Others contend the war can be won with only a small economic sacrifice on the part of the individual.

However, the provincial and federal governments have yet to make any major moves against the major polluters.

Industry has only been forced to clean up its operation where obvious cases of pollution creating public outcry have been involved.

The question of responsibility is a sticky one. If pollution is considered to be a part of Agriculture, Industry, and/or Public Health it will come under the jurisdiction of existing ministries in the federal and provincial governments. Environmental control programs established under the departments involved would be valid and should be established to handle the problem.

If the problem is deemed to be a new one which is not under the jurisdiction of individual ministries, then it lies solely within the responsibility of the federal government: the British North America Act leaves any areas not expressly covered by the Act to the federal government.

Separate pollution ministry?

The fact that some work on pollution control has been done at every level of government without opposition on the part of the federal government or the courts would indicate that the problem is considered to be part of the established fields of influence. But many people have argued that the problem should be handled exclusively by a separate ministry at the federal level.

"The entire problem of pollution should be tackled by a single Ministry of Environmental Control within the Federal Government. This ministry should act under a bill which would guarantee Canadians the right to clean air, fresh water, and a sound environment," according to one lawyer presently fighting a case involving property damage caused by pollution.

"Punishments for contributing to pollution should be made flexible enough to hurt major companies into action," he added.

Individuals share the responsibility for pollution with industries. By driving cars, particularly those with faulty mufflers, by smoking cigarettes, and by the unfortunate every-day activities of breathing, defacating, and taking out the garbage, individuals create almost 50 per cent of the pollutants in water and atmosphere. Industry, by belching smoke out into the air, dumping solids into rivers and lakes, using noisy jackhammers and heavy equipment, creates the other half of the unnecessary sound, air and water pollutants. There is room for improvement through government regulations insisting on emission control devices on cars, city treatment of sewage, company treatment of industrial wastes, and a little bit of care on the part of the individual or industry involved in perpetuating the pollution. Who the government is willing to regulate, industry or individual, is yet to be seen.

Who is to sacrifice?

"The general public may be forced to walk rather than drive, and only be allowed to piss on alternate Thursdays, before the major oil refineries in town will be asked to clean up their effluents," was the opinion voiced by one government critic.

This may be an exaggeration, but we can see that most agencies which have taken any direct action against air pollution have started on the individual. Emission control devices for cars have been demanded by law in many states in the United States, several European countries, and in Canada will soon be regula-

PHOSPHATE CONTENT OF DETERGENTS

Following is a break-down of the type of detergent, soap or cleaning agent and the percentage of phosphates. Those products which have less than 1 per cent phosphate content are indicated with an (X).

HEAVY DUTY LAUNDRY DETERGENTS	LAUNDRY SOAPS	LIQUID DISH DETERGENT
Alkaline 40	Instant Sels 9	All tested were less than 1%
Beer 44.5	Lux X	
Hydrol 44.5	Mopla Leaf Soap X	
Ida III 43.5	Phos X	
rise 43.5	Ivory Snow X	
11 30		
unlight 37		
ph 30.5		
ratio Power 30.5		
Jan 2 30		
to 30		
m 30		
old 23.5		
ard 30.5		
range 30		
cano 37		
lak 10.5		
ite Magic with 40		
ite Magic low 40		

LAUNDRY SOAPS

Instant Sels 9

Lux X

Mopla Leaf Soap X

Phos X

Ivory Snow X

LIQUID DISH DETERGENT

All tested were less than 1%

MISCELLANEOUS

Calgon Water conditioner 75.5

Apic and Apic 81

Mr. Clean 5.5

Ajax All Purpose 5.5

Arm and Hammer Gel Soda X

Fleecy X

Javox Bleach X

Jet Spray X

Bonny X

Scotch Bleach X

Borax X

Pine-sol X

White Magic Cleanser 13

FIGURES QUOTED - WITHIN 10%

french maid
HEAVY DUTY
LAUNDRY
DETERGENT

NET WT 42 oz. 2 lb 10 oz.

MANUFACTURERS CHART A NEW COURSE

... changing pollutants in mid-stream

tion equipment in British Columbia and Ontario. In most cases, little or nothing has been done to limit the air pollution produced by industry.

In Madrid, Spain, a motorist stopped for any reason, even to wait for a stop-light, must turn off his ignition rather than idle the motor. In many European cities down-town streets have been turned into promenades, forcing automobiles to stay in the suburbs. This not only cuts down on pollution but also saves the cities the costs of road and street repairs, while creating a pleasant, healthy down-town environment. Meanwhile the industrial areas on the cities' outskirts continue to blacken the sky and foul the water. Industry, an equal partner with the individual where pollution is concerned, has not been forced to take on equal restrictions with the individual.

The restrictions of individuals and industry gives rise to some concern over the possibilities of big brotherism in the name of pollution control, if laws should be made too extensive, stern, or unbending.

"Where does intervention on the behalf of the people end, and the needless interference of the government into the activities of the business community begin?" asks a B.C. lawyer.

"Surely there are clear examples of dangerous pollution: the dumping of untreated sewage into the rivers and the flooding of the air with noxious gases. But I do not think that the government has the right to move into these areas without first examining all the possible alternatives and then treading very lightly on the rights of the individuals and companies who will have to suffer in the light of pollution control," he said.

Some advocates of pollution non-control claim that companies will police themselves as soon as public reaction becomes strong enough. A glance at New York, Toronto, and Los Angeles should quickly dispel this argument.

In Los Angeles oil companies have fouled several beaches. Despite strong, almost militant protest, Santa Barbara is still closed to the public because of

its strong resemblance to the Athabasca oil sands, and there has been no action on the part of the oil companies responsible to try to clean it up.

Polluting factories in New York and Toronto were not closed down until a recent air inversion caused a smog build-up that killed hundreds of people and made it impossible for factory employees to work without the protection of gas-masks. Since most companies did not have a stock of gas-masks available, their operations were forced to close down. With the passing of the air inversion, however, most of these factories are back in operation again, with no promise of a let-up in their carbon monoxide production.

Industry in the city of Chicago feels justified in ignoring the pollution problem for a little while yet, since it will be at least 15 years before pollution becomes bad enough to warrant the evacuation of the city, according to a Chicago Chamber of Commerce report. Unfortunately Chicago businessmen could not see the humor in the report.

Public concern over these and other occurrences in the United States and Canada has received some regard from government officials. (Government reaction has mostly been the making of soothing speeches to the general public. One official addressing students at a California junior college extolled the virtues of California pure water while drinking from a pitcher containing water spiked with a clear but very bitter chemical compound being dumped by a local company into the nearby river. The speaker drank heartily and never batted an eye at the foul taste of the water.)

Yet the rising tide of disgruntled members of the general public who are voicing their dissatisfaction with the present smell of the atmosphere are having a noticeable effect. Letters to Members of Parliament and Members of Legislative Assemblies praying for action on the pollution front will eventually force politicians into action. Whether or not that action will be taken in time is up to the letterwriting public.

University should consider ecological studies program

By D. C. WIGHTON

I suggest that the university considers that the study of man's environment—natural, social, built and complex—presents a splendid focus for future academic development. It not only touches on a life and death problem for the supporting society, but opens up new lines of intellectual experiment that ought to keep us busy for a generation or more.

The length of time during which we can still afford to be sending ecologically illiterate graduates into the decisionmaking areas of society is very short, perhaps a decade.

We all have experienced the conservative quality of structurally-complex universities. Most are usually dominated by an individual with an idea and legitimized by a committee. This system is not adequate for environmental studies since environmental education is basically synthesizing in method.

Environmental studies have to involve many of the traditional clans which are not used to combining in the way required.

The political interest in the environment demands proposals for action on all time scales, from the immediate assault on pollution problems and other festering sores of today, to the long-term reconstruction of society in a better relation with the environment.

In many universities that have launched environmental studies, there is only provision to look after the natural environment, and the grouping consists of various interested parties in the physical and biological sciences, sometimes with geographers thrown

in. In others, the entire enterprise is given a strongly ecological twist. In still others the emphasis is upon planning and the prime movers are architects.

The number of open options is large, but one rarely finds a case where a university in N. America has committed itself deeply to a broadly based curriculum.

Fortunately, awareness of the ecological crisis is most acute among school children, aptly so since they are the generation which is destined to suffer for the ineptitudes and plain selfishness of the present-day decision-makers. They are demanding to know what is going to be the ultimate effects of this and that upon the environment.

The public school teachers and the high school teachers have the responsibility to make pupils concerned about those matters for which they would be concerned, and yet not breed hysteria into the young population. It appears however, that most teachers have graduated without competence in human ecology.

I believe that if we do not attempt to attack today's requirements we shall be bypassed by the creation of new kinds of institutions more flexible and realistic in outlook.

Whether this can be adequately carried out at the undergraduate level seems highly doubtful if only owing to the rarity of teachers with the necessary background. A more likely solution may be achieved through co-operation of faculty members and the institution of post-graduate studies in certain specified fields.

STOP the world . . .

STOP (Save Tomorrow—OPPOSE Pollution) is an anti-pollution group that was formed here in Edmonton in February of this year.

The volunteers in STOP feel that they cannot effectively deal with all areas of pollution, so they limit their function to demanding "strict enforcement of existing pollution controls and immediate legislation to stop further pollution."

They also aim to "press for government and legal action as the most effective means of combatting pollution" and have sent over 3,500 cards to the various levels of government pressing for action regarding pollution control.

In the past they have looked into the Athabasca oil spill, and organized a ravine clean-up. A "Dirty Pictures Contest" is presently under way, and the deadline has been extended to October 11, to coincide with "Survival Day" (October 14 to 16).

The contest is open to anyone, and prizes include a camera, and copies of "Alberta: A Natural History" and "Canada—A Year of the Land".

On "Survival Day", events will cover the full range of survival, including pollution. The organization hopes to have 102 Street, between 102 Avenue and Jasper Ave. blocked off on October 14, National Survival Day.

If this can be done, there will be speakers, guerilla theater, musical entertainment, a children's play area, a pedestrian mall (possibly with a snack area, potted plants and shrubs) and information areas throughout. Other groups and organizations involved in this project will include the United Nations Association, the Edmonton Anti-pollution Group, CARE, the Red Cross, and several groups concerned with combatting various diseases.

On October 16, Ralph Nader (well-known as an active anti-pollutionist) will speak publicly twice.



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Iowa Quartet opens chamber season

The Iowa String Quartet opens the 1970-71 Edmonton Chamber Music Society season on October 14, 1970 with an all Beethoven program.

The group is firmly established as a chamber music ensemble of international stature. In April, 1967, shortly after their third European tour, they were awarded the loan of the fabulous Paganini Stradivarius instruments by the Corcoran Gallery of Washington, D.C. Since then, the Quartet has performed all of its concerts on these instruments.

The Quartet was formed in 1958 at the University of Iowa. The conviction that the highest standard of quartet playing is attained only when each member is an artist in his own right has led the Iowa String Quartet into the realm of the elite among present day chamber music ensembles. Each of the players has a prodigious background as a soloist, as well as in chamber music.

The Iowa String Quartet is one of the few all-American chamber music ensembles giving concerts on an international scale.

The concert is given as a prelude to the opening of the exhibition "Beethoven, the Man and his Time", which will open at the U of A Art Gallery and Museum on October 15, 1970.

Other performances include "Soni Ventoruri," November 18; "Francesco Chamber Trio," January 13; "Purcell String Quartet," February 10; "Edmonton Chamber Players," March 10; and the world famous "Hungarian Quartet" on March 31.

Admission to the concerts is by season membership only. Season tickets are available by mail from The Edmonton Chamber Music Society, from the Department of Music, or at the Students' Union information desk. Adult memberships are ten dollars, senior citizens' five dollars, and students' four dollars.

All concerts are at Convocation Hall, and start promptly at 8:30 p.m.



The Iowa String Quartet

William Shakespeare please come home

Somewhere on this campus is a frustrated playwright who would like to see his work performed. So thinks Ed Turner, G.T.A. in the English department, who would like to have some noon theatre in the SUB Gallery. There being no drama club, a pool of directors, actors, and stage crew must be formed.

The idea is not to have a full scale production, but rather a dress rehearsal in the Gallery. The writer

would then get a chance to see his work performed and afterwards he could rap with the audience about it. In this way, he would get ideas for future writing and, if the play showed promise, he could work on a full scale production for sometime after Christmas.

Cec Pretty promises full cooperation with set production and flats. Myra Davies, director of the Gallery, is very interested in the project.

If you want acting, directing, producing, set making, lighting, or play writing experience, this is a good chance for you to practice your art.

Interested persons should leave their name and phone number at the music listening desk in SUB. When there are enough names you will be contacted for some initial meetings. Go talk with Ed Turner in Assiniboia Hall if you have any further questions.

Mayall show a letdown

I went to Sunday Night's John Mayall concert specifically to hear Harvey Handel (Mayall's new guitar player). I'd even have gone to Saskatoon to see Harvey Handel. So imagine the shock to find, not only Harvey Handel on stage, but Don "Sugarcane" Harris as well! I'd go to Moose Jaw (on a bike!) to see Sugarcane.

Sugarcane was just unreal, shuffling in as if he'd lost his way trying to find the single men's hostel, hair all messed up, stoop-shouldered, weaving just a bit, but on stage with his fiddle, the man was nine feet tall and pretty mean. That's right—he plays the violin (only mostly, he plays the blues).

The present John Mayall aggregation, in addition to Mandel, who was Charlie Musselwhite's guitarist before he left to record three albums of his own, and Sugarcane, who has been with the Johnny Otis Show for as long as I can remember, features Larry Taylor, ex-Canned Heat bassist, and John Mayall. Mayall is continuing to experiment with drummerless bands.

But in spite of this awesome who's who line up, the band was just not cooking. Harvey got off a few nice licks (nothing like any of the orgasmic solos he used to fashion with Musselwhite's band), Sugarcane was playing up his usual storm, but altogether the band didn't quite swing.

There are, as always, several reasons for this. One was the seemingly inevitable hopeless sound system/acoustics combination. Another is—I feel—the lack of a drummer.



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An interview with Frank Zappa

The following conversation is taken from an interview done with Frank Zappa by Holger Petersen on Friday, September 18.

The trouble with interviewing Frank Zappa, of course, is determining whether or not he is serious. This usually causes some difficulty for the interviewer. Perhaps for this reason there are not many interviews done with Frank Zappa.

Q: Have you done any recording with the new group?

A: ... The first new Mothers of Invention album will be out after the first of the year and will probably be called "200 Motels".

Q: I understand you're doing that on stage now.

A: ... We'll be doing a lot of the stuff here tonight... What we're doing is excerpts from the complete work which is something from an opera—ballet type thing. Its not like "Tommy" by the Who. Its got quite a different sort of plot line, and the musical content is different from that.

Basically its a story of what happens to you when you go on the road in a rock and roll band and how that can affect your mind, and a lot of the material deals with the relationships of the rock musicians to the groupies on the road and any other people that you happen to meet... But it's all pretty much a comedy type thing, even though some of the stuff that happens to you on the road isn't funny, we've tried to make it funny.

It will be performed in its complete state in Holland in December as about a two hour T.V. show with a 91 piece orchestra, a forty voice choir, twelve dancers, four mimes and the electric group.

Q: Will it be filmed at all?

A: It will be transferred to film after it's been videotaped, and it's quite possible that it will be released as sort of an X rated musical because a lot of the material on it is bold.

Q: Do you plan to get back into lyrics?

A: Most of what we're doing now is lyrics. We only play one or two instrumental songs, whereas before it was ninety percent instrumental songs. Now it's all vocals, which are handled

extremely well by Mr. Bowman and Mr. Caylan, and sometimes by Mr. Simmons and myself, and even Mr. Duke sneaks in there. Sometimes Mr. Dunbar yodels.

Q: Have any of them [your singles] made the charts?

A: ... "Lonely Girl" got to be a number one record in Arizona... I eventually met the disc jockey who had picked that to go on the air there, and he said that he thought it was a great record. He thought it was commercial, he thought it was a radio record, and he was telling all these other disc jockeys, "Why don't you program that record?" And they said "Are you kidding? We'd never put anything on the air by that group."

So it's not always just a question of whether they like what the record sounds like. There's some connection between how a disc jockey or station programmer feels about the membership or the image of your group that seems to bear on whether or not you get played on the radio.

Q: What about the *Groupy Papers*? Are they finished yet?

A: What's being done to the *Groupy Papers* now is the real names of all the people involved in it are being changed to protect the innocent, and as soon as that's done I think that we'll have the thing out on the market... Cynthia Plastercaster and Pamela GTO: their diaries, their love letters, the interviews I did with them, and some interviews I did with some groupies from New York.

Q: What happened after high school and before the formation of the Mothers?

A: ... I got busted for conspiracy to commit pornography. I was framed by the San Bernardino County vice squad. They sent an undercover agent into my recording studio, disguised as a used car salesman, who asked me to manufacture for a party that he and some other used car salesmen were supposed to have the following Wednesday, a lude and lascivious movie and/or tape, whatever I was prepared to crank out.

Now my personal view is that there is no such thing as pornography. It

exists only in the minds of the people who need that sort of thing. I thought the whole thing was a joke, with no idea whatsoever that this guy was the heat.

So here I am in this studio, starving to death, and this guy says, "I'll give you a hundred dollars for a tape of two people 'doing it'".

And I said, "Oh God, this guy's really got to be a jerk, sure, if he gets off on that I'll make him a tape. They'll be rolling all night over this one."

So I proceeded to manufacture a tape, with the assistance of one of these ladies who happened to be there at the studio at the time, and, just as a technical footnote, we weren't actually 'doing it'. We were pretending to do it and we were laughing all the time we were putting this thing together.

So I sat down with my trusty razor blade and cut out all the laughs, so we had nothing but pure unadulterated grunts and blue dialogue, backed up with a little subdued guitar music to make it sound sort of like a

cocktail session. And the overall effect was probably no worse than side four of the *Freak Out* album.

However, this tape, and all the rest of my research material, and a number of pieces of equipment from my studio were confiscated the next day and I wound up going to jail. They gave me a six months sentence with all but ten days suspended, plus three years probation, and a bunch of ridiculous terms of the probation.

So after that I decided well, maybe I ought to get into show business.

Q: Frank, you're a very sensitive person, and I wonder if when you cross a border between the United States and Canada, or England and Holland or Denmark, do you get a different feeling about it?

A: Well, the first thing I notice are the billboards on the way to the hotel, and the obvious advertising on the street. I compute that along with the terrain. You can judge the people who live in an area partly by the type of country-side they inhabit...

And you can also compute the average mean intelligence of the man in the street in the town by the type of advertising slogans that are present on the billboards and posters that are placed around the town. In other words, the advertising agencies try and figure out just about how smart the people are in the town, when they make their appeals...

And depending on how lame those lines are you can judge how lame the average citizen is going to be in that town.

Advertising varies from area to area. It's not unified all over the place. The same billboards you see here probably won't appear in the next town over, or a couple of hundred miles away. You can make judgements that way. That's the way I get my feelings about a place when I arrive.

Q: Do you have Ralph Williams in Laurel Canyon?

A: Yes we do. Do you have him here?

A: Yes we do.

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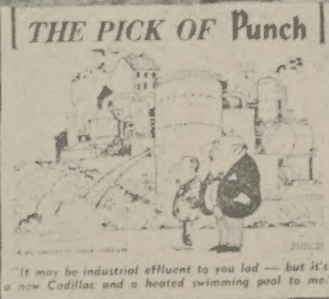
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